



Customer Engineering  
Instructional  
Systems Diagrams

**FOR INSTRUCTIONAL USE ONLY**

**7330** Magnetic Tape Unit

MACHINE TYPE 7330

SERIAL # PLANT

04-08-62

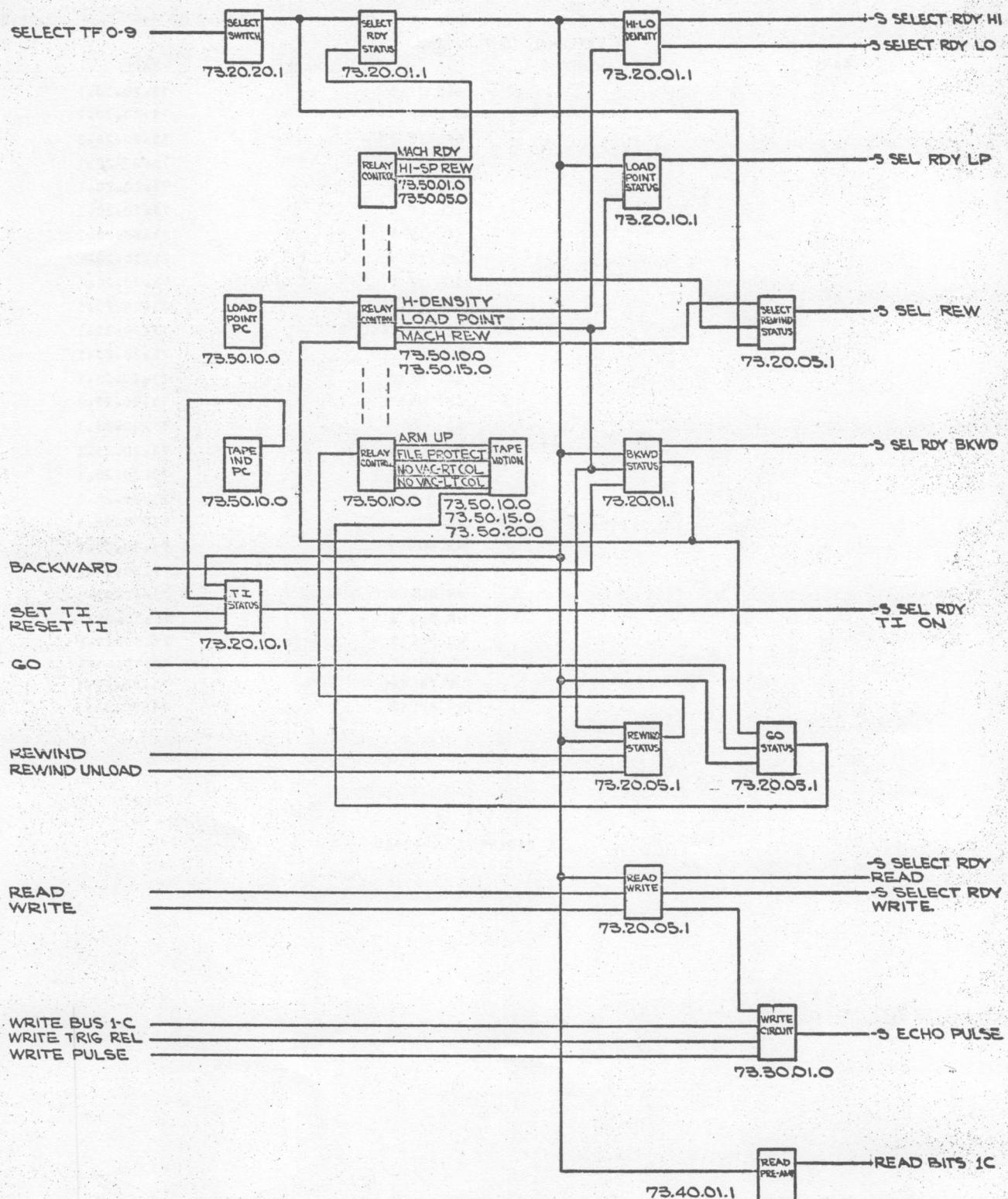
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BR OFF

LOGIC NO.	DESCRIPTION	PART NO	ENG	CHG	ECR NO	SF	B/M
<b>SYSTEM DIAGRAMS</b>							
<b>VOLUME 1</b>							
73.00.10.0	BLOCK DIAGRAM	0556865	248747				
73.00.20.0	EXTERNAL TO T D	0556889	248150G				
73.00.30.0	T D TO EXTERNAL	0556890	248150G				
73.00.40.0	SET READ TU	0556862	248150G				
73.00.50.0	REWIND T U	0556863	251021				
73.04.01.0	LOCATION CHARTS	0556883	251021				
73.04.02.0	E C LAYOUT	0556884	251021				
73.04.03.0	VOLT DISTRIBUTION -48	0556885	249984				
73.04.04.0	VOLT RETURN -48	0556886	251021				
73.04.05.0	CIR CD LOC CHT 00A6	2 SHEETS	0556887	251009			
73.04.06.0	T/C CONNECTOR RECEPTACLE		0556888	248150G			
73.04.07.0	CIR CARD LOC CH 00B5		0556882	248897			
73.04.08.0	WRITE HEAD WIRING		0556897	251009			
73.20.01.1	SELECT BKWD REWIND		0556867	251009			
73.20.05.1	READ WRITE GO REW UNLD		0556868	251009			
73.20.10.1	LP TI TAPE BREAK		0556869	249769			
73.20.15.1	RIGHT LEFT MTR CLUTCH BKWD CLUTCH		0556870	249984			
73.20.20.1	SELECT		0556871	251009			
73.20.25.1	LINE CONVERSION COMMAND		0556872	249984			
73.30.01.1	WRITE TR 1 2 3 4		0556873	251009			
73.30.01.2	WRITE TR A B C		0556874	251009			
73.30.01.3	DELAY LINES		0556858	249984			
73.30.05.1	LINE CONVERSION WRITE		0556875	249434			
73.40.01.1	READ PREAMPS		0556876	251009			
73.50.01.0	RELAY LOGIC		0556877	249984			
73.50.05.0	RELAY LOGIC		0556878	251021			
73.50.10.0	RELAY LOGIC		0556879	249984			
73.50.15.0	MOTION CONTROL		0556880	249984			
73.50.20.0	INPUT PWR BLOWER MTRS		0556881	249984			
73.50.25.0	6-12V PWR SUP - 3 SHEETS		0556754	249984			
73.50.30.0	-48 VOLT POWER SUPPLY		0556857	248747			
73.50.35.0	7330 TESTER		0556828	249521			

## BLOCK DIAGRAM

73.00.10.0



INTERNATIONAL BUSINESS MACHINES CORP.	DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME SYSTEMS DIAGRAM	11-21-60	248150-G			X PRINT TO ENG. SPEC. NO.	01
73.00.10.0	1-1-61	248747			859291	02
DESIGN RAV 5-2-60 MODEL 7350						03
DETAIL 1D 10305						04
CHECK RAV 5-14-60 DRAW						05
APPROV. R. E. 10-12-60-FC CHECK						06
					DWG. SIZE - C	07
					73.00.10.0	08

EC 248150G 10-18-60

P-N. 556889  
FROM EXTERNAL

REFERENCE PAGE EXTERNAL TO T.D.	PG 1 OF 1	73.00.20 TO T.D.
PAGE	NAME	PAGE
	SEL TF 0	73.20.20.1
	SEL TF 1	73.20.20.1
	SEL TF 2	73.20.20.1
	SEL 1F 3	73.20.20.1
	SEL 1F 4	73.20.20.1
	SEL 1F 5	73.20.20.1
	SEL 1F 6	73.20.20.1
	SEL 1F 7	73.20.20.1
	SEL TF 8	73.20.20.1
	SEL TF 9	73.20.20.1
	REWIND CALL	73.20.25.1
	BKWD	73.20.25.1
	SET READ	73.20.25.1
	SET WRITE	73.20.25.1
	GO	73.20.25.1
	REW UNLD CALL	73.20.25.1
	II ON	73.20.25.1
	II OFF	73.20.25.1
	WR BUS 1	73.30.05.1
	WR BUS 2	73.30.05.1
	WR BUS 4	73.30.05.1
	WR BUS 8	73.30.05.1
	WR BUS A	73.30.05.1
	WR BUS B	73.30.05.1
	WR BUS C	73.30.05.1
	WR TR REL	73.30.05.1
	WR PULSE	73.30.05.1

EC 248150G 10-18-60

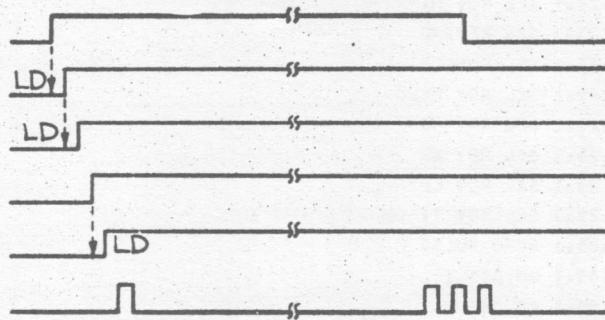
REFERENCE PAGE		PG 1 OF 1		73.00.30.0	
T.O. TO EXTERNAL				TO EXTERN	
PAGE	NAME	NAME	PAGE		
73.20.25.1 SEL RDY H1					
73.20.25.1 SEL REWIND					
73.20.25.1 SEL RDY LO					
73.20.25.1 SEL RDY BKWD					
73.20.25.1 SEL RDY RD					
73.20.25.1 SEL RDY WR					
73.20.25.1 SEL RDY LP					
73.20.25.1 SEL RDY TI ON					
73.30.05.1 ECHO PULSE					
73.30.05.1 RD BIT 1					
73.30.05.1 RD BIT 2					
73.30.05.1 RD BIT 4					
73.30.05.1 RD BIT 8					
73.30.05.1 RD BIT A					
73.30.05.1 RD BIT B					
73.30.05.1 RD BIT C					

556862

DWG. SIZE - B

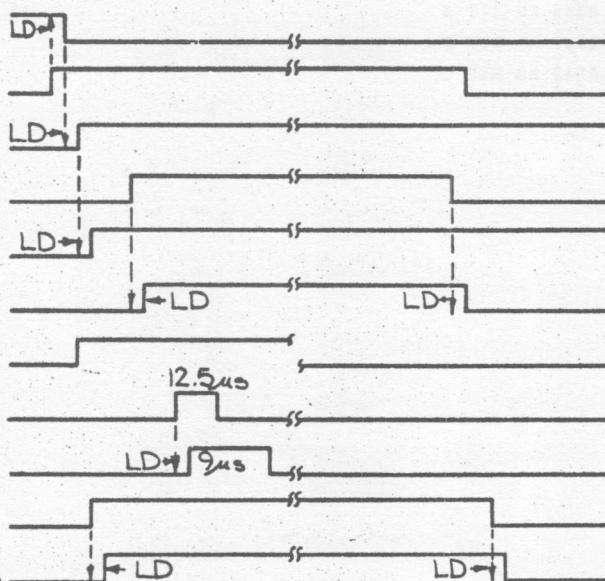
## SET READ TU

SET READ  
READ/WRITE TRIG  
SEL RDY RD  
GO  
GO STOP SOLENOID  
READ BITS 1-C



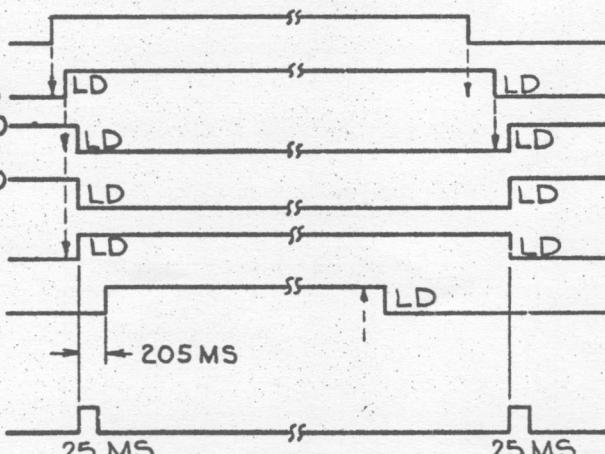
## SET WRITE TU

READ/WRITE TRIG  
SET WRITE  
SEL RDY WRITE  
WRITE TRIG REL  
WRITE GATE  
WRITE TRIG REL-1  
WRITE BUS 1-C  
WRITE PULSE  
ECHO PULSE  
GO  
GO-STOP SOLENOID



## BACKWARD CALL TU

01.01 BKWD  
01.01 SEL RDY BKWD  
01.04 LEFT MOTOR FWD  
01.04 RIGHT MOTOR FWD  
01.04 BKWD STATUS  
01.02 GO (+5)



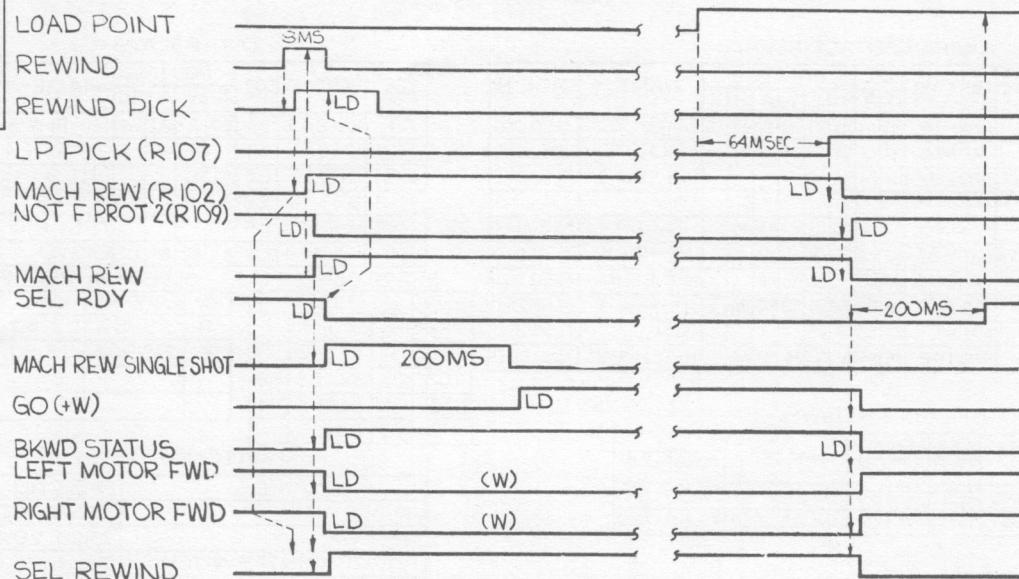
NOTE: LD IS LOGICAL DELAY

INTERNATIONAL BUSINESS MACHINES CORP.	DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME SYSTEMS DIAGRAM	11-21-60	248150-G			X PRINT TO ENG. SPEC. NO.	556862
DESIGN RAR 10-11-60 MODEL 7330					895291	
DETAIL ID 10-12-60						
CHECK RAR 10-20-60 DRAW!						
APPRO LBF 10-21-60 CHECK						73.00.40.0

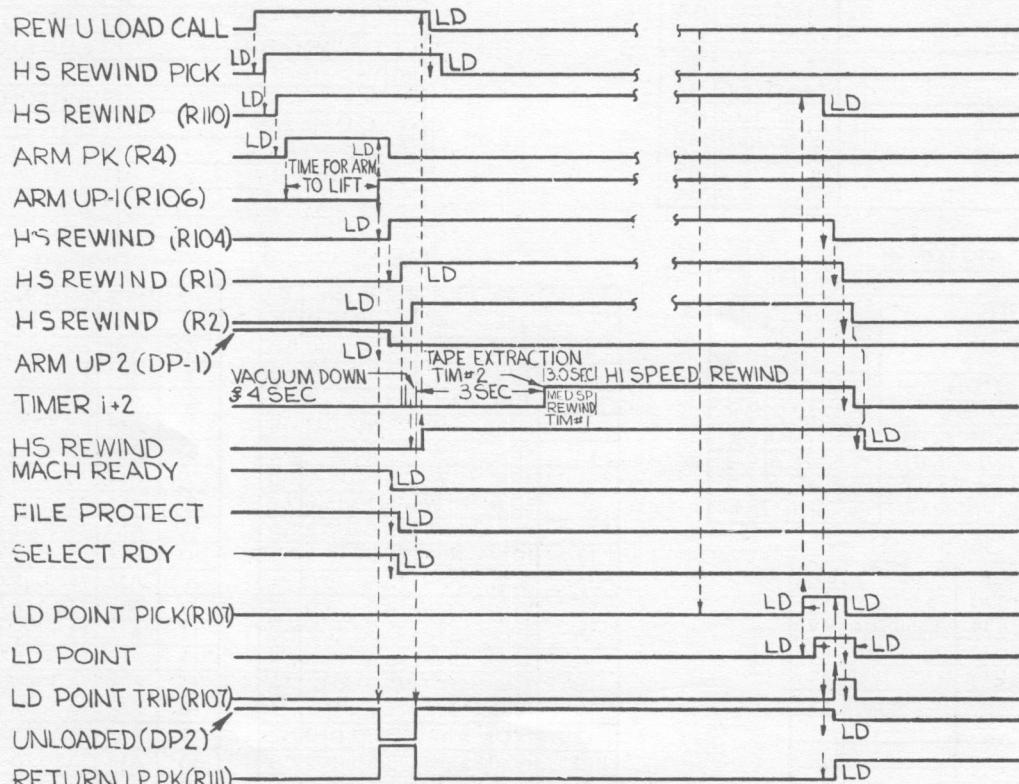
556863

## REWIND T.U.

73.00.50.0



## REWIND UNLOAD T.U.



DPI & DP 2 WILL PICK AND R106 WILL DROP OUT WHEN LOAD  
REWIND ARM IS LOWERED

NOTE: LD IS LOGICAL DELAY

INTERNATIONAL BUSINESS MACHINES CORP.	DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME SYSTEMS DIAGRAM	11-21-60	248150-G			X PRINT TO ENG. SPEC. NO.	U
73.00.50.0	7-7-61	249769			895291	U
DESIGN RAR 10-11-60 MODEL 7330						6
DETAIL ID 10-13-60	12-28-61	249984				8
CHECK RAR 10-20-60 DRAW	2-27-62	251021				6
APPRO LBF 10-21-60 CHECK						W
					73.00.50.0	

## LOCATION CHARTS

73.04.01.0

## WIRE CONTACT RELAYS

RELAY NO.	SIZE	TYPE	PART NO.	COIL	POINTS						NAME	PAGE NO.	
					P	H	1	2	3	4	5	6	
101	6	S	196198	B1	B1	B1	A1	A3	B1	A5	A5	MACH RDY	73.50.01.0
102	6	S	196198	B1	B1	B1	B3	B5	A5	B3	B1	MACH REW	73.50.01.0
104	4	S	196208	B1	B1	B4	B3					H.S. REW-2	73.50.01.0
106	6	S	196198	B2	B2	A3	B1	B1	A5	A4	E2	ARM UP 1	73.50.01.0
107	4	LATCH	186685	B2	B2	B1	B1	A5	B2			L.P. PICK	73.50.01.0
109	4	S	196208	B3	B3	B6	B6	B6	A5	B6		NOT F.P. #2	73.50.05.0
110	6	S	196198	B1	B1	B1	B1	B3	B2	B4		H.S. REW-1	73.50.01.0
111	4	LATCH	186685	B3	B3	B1	B3					RTN LP	73.50.05.0
114	6	S	196198	B4	B4	B1	A3	A4	B3	A5		MACH VAC	73.50.05.0

## DOUBLE POLE RELAYS

RELAY NO.	PART NO.	COIL	POINTS		NAME	PAGE NO.
			PV	I	2	
1	223642	B3	B7	B9	ARM UP 2	73.50.05.0
2	223642	B3	B7		UNLOADED	73.50.05.0

## LIGHTS

NAME	PAGE NO.	LOC
T.I. LAMP	73.50.01.0	B2
L.P. LAMP	73.50.01.0	B2
TAPE INDICATE	73.50.01.0	B2
SELECT	73.50.01.0	B2
FUSE	73.50.01.0	B2
FILE PROTECT	73.50.10.0	B5
READY	73.50.10.0	B5
HI DENSITY	73.50.10.0	B6
LO DENSITY	73.50.10.0	B6

## MOTORS

NAME	PAGE NO.	LOC
LT REEL MOTOR	73.50.15.0	A7
RT REEL MOTOR	73.50.15.0	A7
TIMER MOTORS	73.50.20.0	B9
VACUUM MOTOR	73.50.20.0	B9
CAPSTAN MOTOR	73.50.20.0	B9
PRESS. BLOWER MTR	73.50.20.0	B10
GATE A6 BLOWER MTR	73.50.20.0	B9
GATE A5 BLOWER MTR	73.50.20.0	B9
GATE AB BLOWER MTR	73.50.20.0	B9

## FUSES

NO	TYPE	PART NO.	PAGE NO.	LOC
1	5FNA	322890	73.50.20.0	A9
2	7FNA	322899	73.50.20.0	A9
3	5FNA	322890	73.50.20.0	A9
4	2FNA	322784	73.50.20.0	A9
5	1FNA	322895	73.50.20.0	A9
6				
7				
8				
9	2MIC	322892	73.50.30.0	-
10	7MIC	503976	73.50.30.0	-

## TIMER MOTORS

POINT	PAGE NO.	LOC
1	73.50.15.0	B7
2	73.50.15.0	B7

## INTERNATIONAL BUSINESS MACHINES CORP.

NAME	SYSTEMS DIAGRAM	DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE
	73.04.01.0	11-21-60	248150-G	7-7-61	249769	X PRINT TO ENG. SPEC. NO.
DESIGN RAV	8-8-60 MODEL 7330	1-11-61	248747	10-4-61	249780	895291
DETAIL ID	8-9-60	2-2-61	248897	12-28-61	249984	
CHECK KAY	8-11-60	3-9-61	249254	2-27-62	251021	DWG. SIZE - C
APPRO LBF	10-18-60	4-19-61	249434			73.04.01.0

## DUO RELAYS

RELAY NO.	PART NO.	COIL	POINTS	NAME	PAGE NO.
R1	124843	B4	B7 B4 A1 B9	H.S. REW-3	73.50.05.0
R2	124843	B4	B7 A5 A7	H.S. REW-4	73.50.05.0
R3	111351	B2 A1		LITES	73.50.01.0
F.P.1	333110	B3 A3	B3	NOT F.P. 1	73.50.05.0
R4	124843	B4 A8		ARM PIC	73.50.05.0
R5	124843	B4	A7 A1 B7 B7	BKWD	73.50.05.0

## R.C. BLOCKS

R.C.	POS	R.C. BLOCKS			
		1	2	3	4
103		B1	B1	B2	
108		B3	B3	B3	B4
112			B4	B4	B4
113		B3	B3		

NO.	PART NO.	PAGE NO.	LOC
SRI	315902	73.50.15.0	B8
SR2	315902	73.50.15.0	B8

## SELENIUM RECTIFIERS

NAME	PAGE NO.	LOC
LO SPD REW	73.50.01.0	B1
SELECT	73.20.20.1	-
POWER CONT. SWITCH	73.50.20.0	B10
HI-LO DENSITY SWITCH	73.50.10.0	B6
MACH VAC RIGHT	73.50.05.0	A4
MACH VAC LEFT	73.50.05.0	A4
RT COL VAC SW	73.50.10.0	A5
LT COL VAC SW	73.50.10.0	A5
START	73.50.01.0	B1
RESET 1	73.50.01.0	A1
FUSE BAIL SW	73.50.01.0	A1
HI SPD REW	73.50.01.0	B1
ARM DOWN	73.50.01.0	B2
DOOR INTERLOCK	73.50.01.0	A1
REEL RELEASE	73.50.05.0	A3

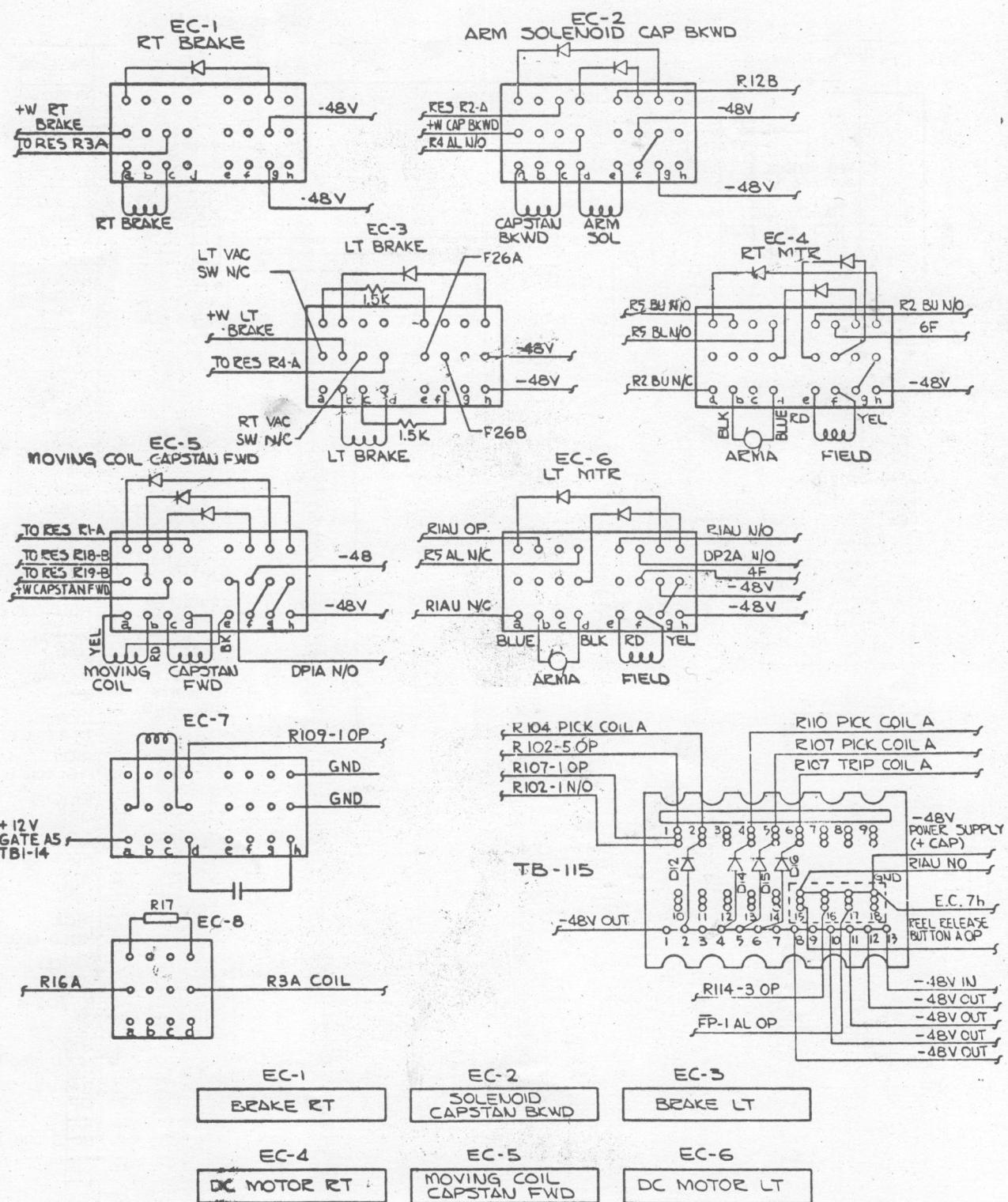
## RESISTORS

RES NO	VALUE	PAGE NO	LOC
1	125Ω 5W	73.50.15.0	B8
2	125Ω 5W	73.50.15.0	B8
3	75Ω 10W	73.50.15.0	B8
4	75Ω 10W	73.50.15.0	B8
5	500Ω 25W	73.50.15.0	B8
6	100Ω 25W	73.50.15.0	B7
7	350Ω 10W	73.50.15.0	B8
8	50Ω 25W	73.50.15.0	A8
9	1.5K .5W	73.50.10.0	B5
10	10Ω 100W	73.50.15.0	E7
11	50Ω 100W	73.50.30.0	-
12	10Ω 100W	73.50.15.0	B7
13	25Ω 25W	73.50.15.0	B8
14	250Ω 25W	73.50.15.0	B7
15	50Ω 5W	73.50.10.0	A6
16	100Ω 2W	73.50.01.0	B2
17	500Ω 5W	73.50.01.0	B2
18	15Ω 25W	73.50.15.0	B8
19	150Ω 10W	73.50.15.0	B8
20	25Ω 25W	73.50.15.0	A8
21	1.5K 5W	73.50.10.0	B5

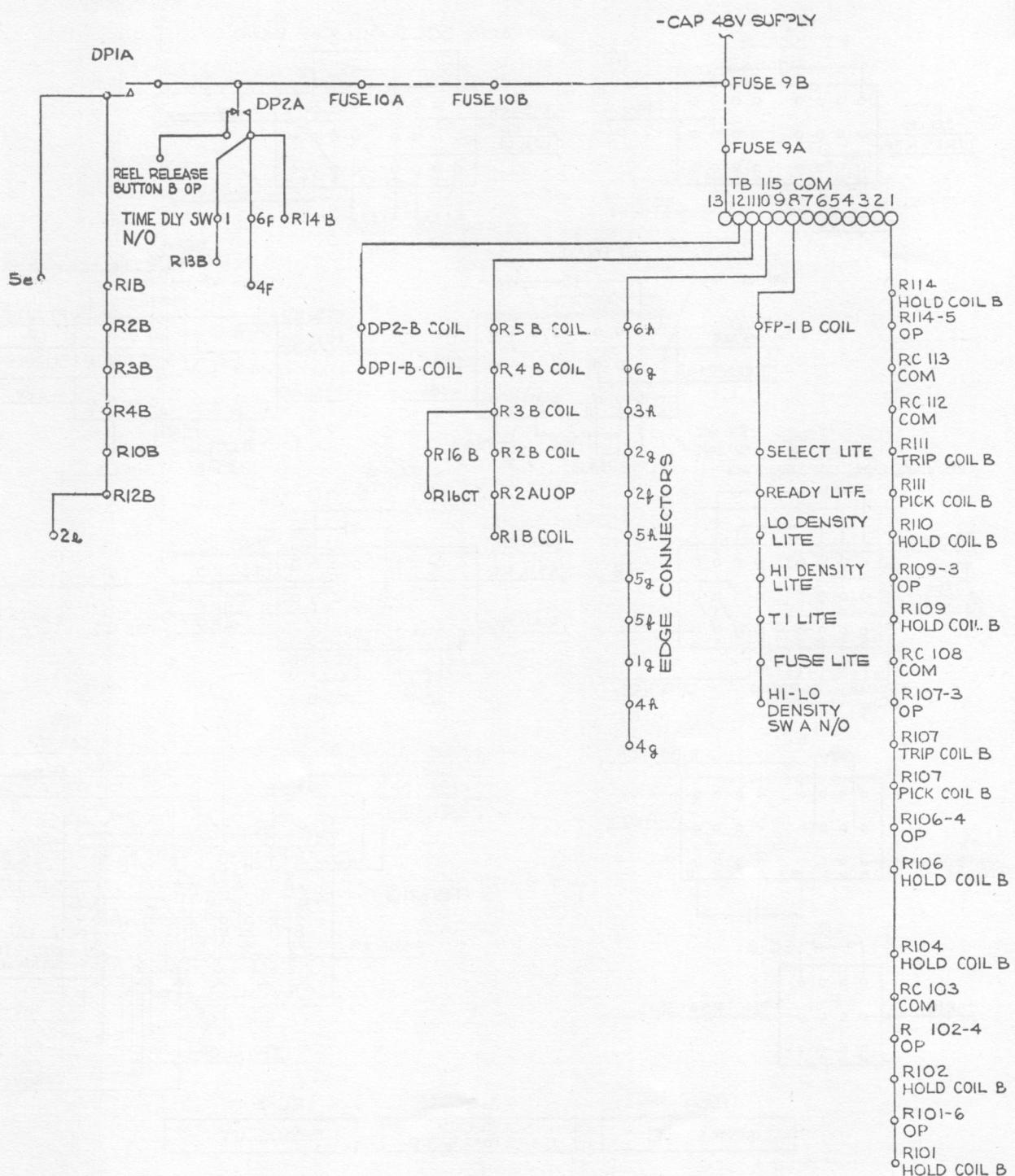
## CAPACITORS

20μF 150V	73.50.15.0	B8
100μFD 20V	73.50.10.0	A6

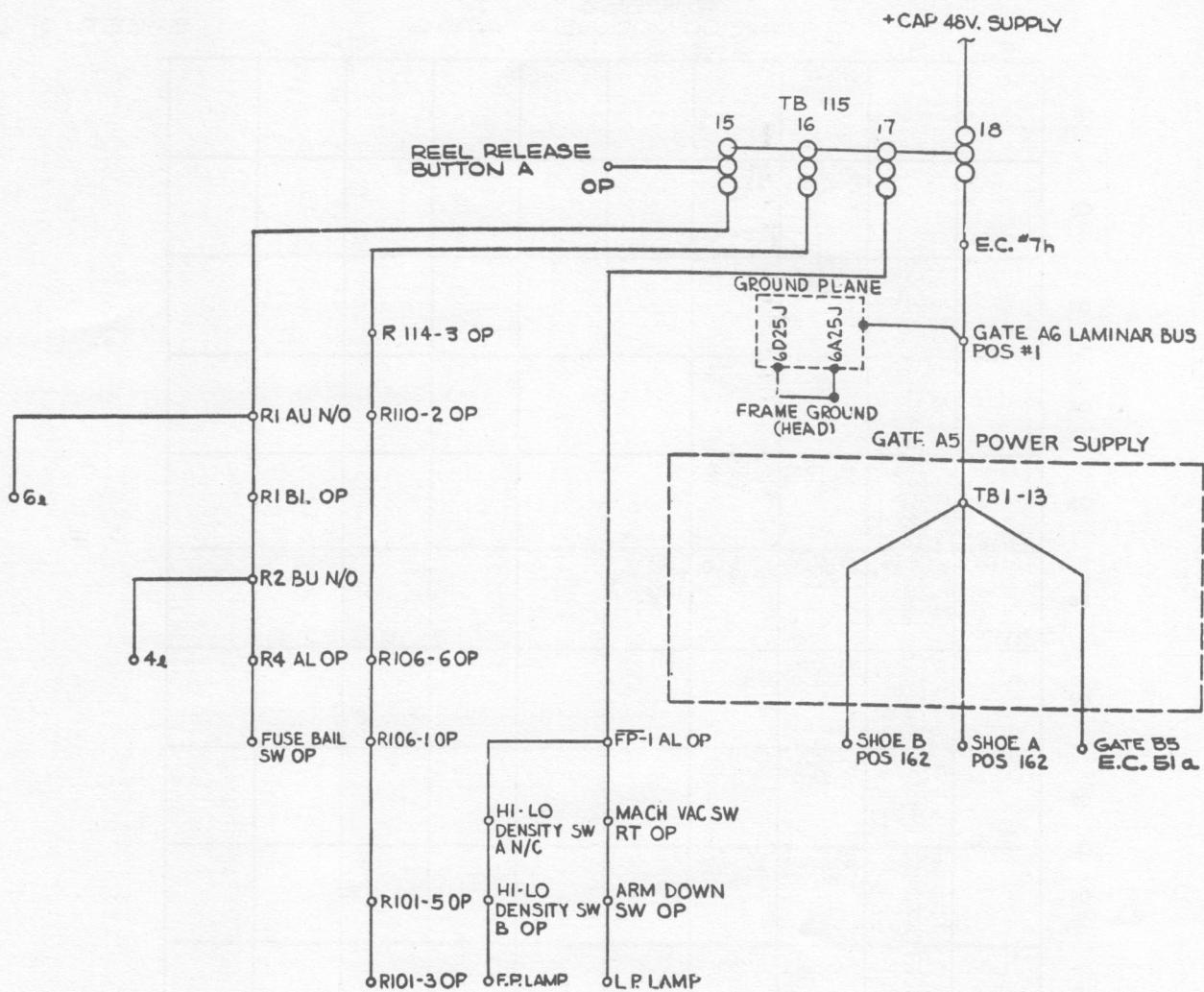
556888



INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.	UT
NAME	SYSTEMS DIAGRAM	11-21-60	248150-G	7-7-61	249769	X PRINT TO ENG. SPEC. NO.		UT
DESIGN	73.04.02.0	7-3-61	248747	10-4-61	249780	895291		UT
DETAIL	7330	22-6-61	248897	12-28-61	249984			UT
CHECK	8960	3-9-61	249254	2-27-62	251021			UT
APPROV	RAY 8-16-60 DRAW							UT
	LFS 10-18-60 CHECK	4-19-61	249434					UT
						DING. SIZE C	73.04.02.0	UT



INTERNATIONAL BUSINESS MACHINES CORP.	DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME SYSTEMS DIAGRAM	11-21-60	248150-G	7-7-61	249769	X PRINT TO ENG. SPEC. NO.	UT
73.04.03.0	1-11-61	248747	12-28-61	249984	895291	UT
DESIGN RAY 6-19-60 MODEL 7330	2-2-61	248897				UT
DETAIL GT 620 60						UT
CHECK 9-8-61 DRAW	3-9-61	249254				UT
APPRO LBF 10-18-60 CHECK	4-9-61	249434				UT
						73.04.03.0



CARD LOCATION CHART  
RUN 354  
FRAME 00 MODULE A GATE 6

SHEET 1 OF 2

	F	E	D	C	B	A						
01			AYWR 371042 73.20.15.1 5G									
02			AYWS 371041 73.20.01.3 2D		CL- 73.16.7 73.20.01.2 2D							
03			MX- 3710661 73.20.10.1 73.20.10.1 73.20.10.1 73.20.15.1	BP- 371439 73.20.01.3 3E	MR- 371623 73.20.01.1 3E							
04			CD- 371029 73.20.01.1 73.20.01.2 73.20.15.1 3I	AYWS 371041 4E	MR- 371623 73.20.03.1 3E							
05	556980		MX- 3710661 73.20.01.1 73.20.01.1 73.20.01.1 73.20.01.1	BP- 371439 73.20.01.3 3C	MR- 371623 73.20.03.1							
06	CAPACITOR CARD		CD- 371029 73.20.01.1 73.20.01.1 73.20.05.1 4E	AYWS 371041 2C	MR- 371623 73.20.05.1 4F	LAH- 371603.1 73.20.10.1 5H						
07	RESISTOR CARD		MX- 3710661 73.20.01.1 73.20.01.1 73.20.05.1 73.20.05.1	BP- 371439 73.20.03.3 3E	MR- 371623 73.20.01.1 3A	MR- 371635 73.20.10.1 2B						
08			WB- 3710660 73.20.05.1 1E	CD- 371032 73.20.05.1 5A	AYWS 371041 4C	MR- 371623 73.20.10.1 2A						
09			MX- 3710661 73.20.05.1 73.20.05.1 73.20.05.1 73.20.05.1	BP- 371429 73.20.03.5 3C	MR- 371623 73.20.10.1 5B							
10			CD- 3710497 73.20.15.1 73.20.15.1 73.20.15.1 73.20.15.1	AYWS 371041 2G	MR- 371623 73.20.15.1 5H							
11			CD- 371029 73.20.05.1 73.20.05.1 73.20.05.1 73.20.05.1	BP- 371034 73.20.01.2 3E	LYG- 371601.1 4I							
12			MX- 371037 73.20.10.1 73.20.10.1 73.20.10.1 73.20.10.1	AY- 371034 73.20.01.2 3C	MR- 371624 73.20.01.2 1F	LYM- 371624 73.20.05.1 4G						
13			CD- 371029 73.20.01.1 73.20.01.1 73.20.01.1 73.20.01.1	AY- 371034 73.20.01.2 3G	NO OPER							
14	MD- 371497		MX- 3710661 73.20.10.1 1E	AY- 371034 73.20.01.1 3G	NO OPER	VAL- 370269						
			73.30.01.1 1H	73.30.01.1 3H								
			73.20.05.1 2I	73.20.05.1 4F								

INTERNATIONAL BUSINESS MACHINES CORP.	DATE	CHARGE NO.	DATE	CHARGE NO.	NOTE	DEVELOPMENT NO.
NAME SYSTEMS DIAGRAM	248150G	7-7-61	249769			556887
73.04.05.0	248747	10-4-61	249780			
DESIGN RAR 1-4-61 MODEL 7530	2-2-61	248897	12-20-61	249984		
DETAIL RAR 1-4-61	3-9-61	249254	2-9-62	251009		
CHECK RAR 1-5-61 DRAW 1D 1-12-61	4-19-61	249434				DWG. SIZE C
APPRO 1-6-61 CHECK						73.04.05.0

**CARD LOCATION CHART**  
 FRAME 00 MODULE A GATE 6  
 RUN 354

	F	E	D	C	B	A
15				AR-- 371034 73.30.01.1 38 73.30.01.1 39	NO OPER	YAW- 370452 73.20.10.1 36
16	MD-- 371497 73.20.01.1 18 73.20.10.1 17 73.20.15.1 11			AR-- 371034 73.30.01.1 3A 73.30.01.1 3D	NO OPER	YAW- 370452 73.20.10.1 3C
17					2	
18	MD-- 371497 73.20.05.1 1D 73.20.05.1 1E 73.20.05.1 1F	MX-- 371661 73.20.15.1 2A 73.20.15.1 2D 73.20.15.1 2E	AR-- 371034 73.30.01.1 3A 73.30.01.1 3B	NO OPER	556981	CAPACITOR CARD
19	WB-- 371880 1D	CD-- 371029 73.20.15.1 3B 73.20.15.1 3C 73.20.15.1 3D	LB-- 371674 73.30.01.2 1C		APA- 370644 73.40.01.1 1E 73.40.01.1 2B	ACW- 370100 73.40.01.1 3B
20	WB-- 371880 1D	CD-- 371029 73.20.15.1 3B 73.20.15.1 3C 73.20.15.1 3D	LB-- 371674 73.30.01.2 1A		APA- 370644 73.40.01.1 1D 73.40.01.1 2D	ACW- 370100 73.40.01.1 3D
21					CEYB 371032 73.20.01.1 1A 73.20.05.1 2D 73.20.05.1 2E 73.20.05.1 3C 73.20.01.1 3I	APA- 370644 73.40.01.1 1E 73.40.01.1 2E
22	WB-- 371880 2E	MX-- 371661 73.20.05.1 1C 73.20.05.1 2A 72.20.15.1 4B 73.20.15.1 4C	LB-- 371674 73.30.01.1 1E	CEYB 371032 73.20.01.1 1A 73.20.05.1 2D 73.20.05.1 2E 73.20.05.1 3C 73.20.01.1 3I	APA- 370644 73.40.01.1 1F 73.40.01.1 2F	ACW- 370100 73.40.01.1 3F
23					NM-- 371666 73.20.10.1 5T 73.20.01.1 5B 73.20.01.1 5C 73.20.05.1 6I	APA- 370644 73.40.01.1 1G 73.40.01.1 2G
24	WB-- 371880 1A	LB-- 371674 73.30.01.1 1A	NM-- 371666 73.20.10.1 5T 73.20.01.1 5B 73.20.05.1 5C 73.20.05.1 6I	APA- 370644 73.40.01.1 1H 73.40.01.1 2H	ACW- 370100 73.40.01.1 3H	
25						
26						
27						
28						

INTECHNICAL BUSINESS MACHINES CORP.	DATE	CHARGE NO.	DATE	CHARGE NO.	NOTE	DEVELOPMENT NO.
NAME SYSTEMS DIAGRAM 73.04.05.0		2481506	7-7-61	249769		
DESIGN RAV 1-14-61 MODEL 7330		248747	10-4-61	249780		
DETAIL RAV 1-14-61	2-2-61	2498597	1-28-61	249984		
CHECK RAV 1-15-61	3-9-61	249254	2-9-62	251009	DWG. SIZE C	73.04.05.0
APPRO LBT 1-16-61 CHECK	4-19-61	249434				556887

556888

A

## T/C CONNECTOR RECEPTACLE

B

73.04.060

15	SHIELD	SET READ	SHIELD	SET WRITE	SHIELD	REWIND CALL	8	SHIELD	BKWD	SHIELD	GO	SHIELD	T.I. OFF	SHIELD	T.I. ON
30	SEL RDY BKWD	SHIELD	SEL RDY LP	SHIELD		-	23	SEL RDY T.I. ON	SHIELD	SEL RDY HI	SHIELD				16
45					SHIELD	REW UNLD CALL	38	SHIELD	SEL REWIND	SHIELD	SEL RDY WRITE	SHIELD	SEL RDY READ	SHIELD	31 SEL RDY LO
60							53								46
75							68								61
85	SHIELD	READ BIT 2	SHIELD	READ BIT 1	81						80	SEL T.U. 1	SHIELD	SEL T.U. 0	76 SHIELD
95	READ BIT 8	SHIELD	READ BIT 4	SHIELD	91						90	SHIELD	SEL T.U. 3	SHIELD	86 SEL T.U. 2
105	SHIELD	READ BIT B	SHIELD	READ BIT A	101						100	SEL T.U. 5	SHIELD	SEL T.U. 4	96 SHIELD
115		READ BIT C	SHIELD	111							110	SHIELD	SEL T.U. 7	SHIELD	106 SEL T.U. 6
125				121							120	SEL T.U. 9	SHIELD	SEL T.U. 8	116 SHIELD
140	-6V			+12V			133		+6V						126
155							148								141
170	-12V						163		GND						156
185	WRITE BUS C	SHIELD	WRITE BUS B	SHIELD	WRITE BUS A	SHIELD	170	WRITE BUS B	SHIELD	WRITE BUS 4	SHIELD	WRITE BUS 2	SHIELD	WRITE BUS 1	171 SHIELD
200			SHIELD	WRITE PULSE	SHIELD	WR TR REL	193	SHIELD	ECHO PULSE						186

A

B

INTERNATIONAL BUSINESS MACHINES CORP.	DATE	CHARGE NO.	DATE	CHARGE NO.	NOTE	DEVELOPMENT NO.
NAME: SYSTEMS DIAGRAM	11-21-60	248150-G			X PRINT TO ENG. SPEC. NO.	
73.04.060					895291	
DESIGN RAY 3-10-73 MODEL 7330						
DETAILS 10 5-10-73						
CHECK DMY 3-10-73 DRAW 1						
APPRO LBF 3-10-73 CHECK					DWG. SIZE - C	73.04.060

556882

73.04.070

CARD LOCATION CHART  
FRAME 00 MODULE B GATE 5  
RUN 354

	F	E	D	C	B	A
01						
02			TCJ- 370333 73.20.20.1 54 73.20.20.1 73.30.05.1 5A 73.30.05.1	TCJ- 370333 73.20.20.1 5D 73.20.20.1 73.30.05.1 5B 73.20.20.1		
03			TCJ- 370333 73.30.05.1 5D 73.30.05.1 5B 73.30.05.1 5F	TCJ- 370333 73.20.20.1 5D 73.20.20.1 73.30.05.1 5B 73.20.20.1		
04			TCJ- 370333 73.30.05.1 54 73.30.05.1 5H 73.30.05.1 5I 4	TCJ- 370333 73.20.25.1 5A 73.20.25.1 73.30.05.1 5B 73.20.25.1 5C 73.20.25.1 5D		
05						
06			TCJ- 370333 73.30.25.1 5A 73.20.25.1 5B 73.20.25.1 5C 73.20.25.1 5D			
07			TCJ- 370333 73.20.25.1 5E 73.20.25.1 5F 73.20.25.1 5G 73.20.25.1 5H	TAB- 370066 73.20.25.1 5E 73.20.25.1 73.20.25.1 73.20.25.1 73.20.25.1 73.20.25.1 5H		
08				TAB- 370066 73.30.05.1 5A		
09				2 3 4		
10						
11						
12						
3						
4						

INTERNATIONAL BUSINESS MACHINES CORP.	DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME SYSTEMS DIAGRAM	248150-G				X PRINT TO ENG. SPEC. NO.	556882
1/3.04.07.0	248747				893291	
DESIGN RAR 1-14-61	248897					
DETAIL RAR 1-14-61	2-2-61					
CHECK RAR 1-15-61	DRAW 10/11-12-61					
APPRO LB F 1-16-61	CHECK					
					W.H.C. SIZE C	73.04.07.0

## WRITE HEAD WIRING

TRACK		LOGIC BLOCK PIN	EDGE CONN	HEAD PIN
1	WH	D24B	D26A	C
	BK		D26COM	R
	R	D24D	D26B	B
2	WH	D23B	D26C	D
	BK		D26COM	T
	R	D23D	D26D	S
4	WH	D22B	D26E	U
	BK		D26COM	F
	R	D22D	D26F	E
8	WH	D21B	D26G	V
	BK		D26COM	J
	R	D21D	D26H	H
A	WH	D20B	D26I	W
	BK		D26COM	L
	R	D20D	D26K	K
B	WH	D19B	D26N	X
	BK		D26COM	M
	R	D19D	D26M	Y
C	WH	D18B	D26Q	P
	BK		D26COM	N
	R	D18D	D26P	A

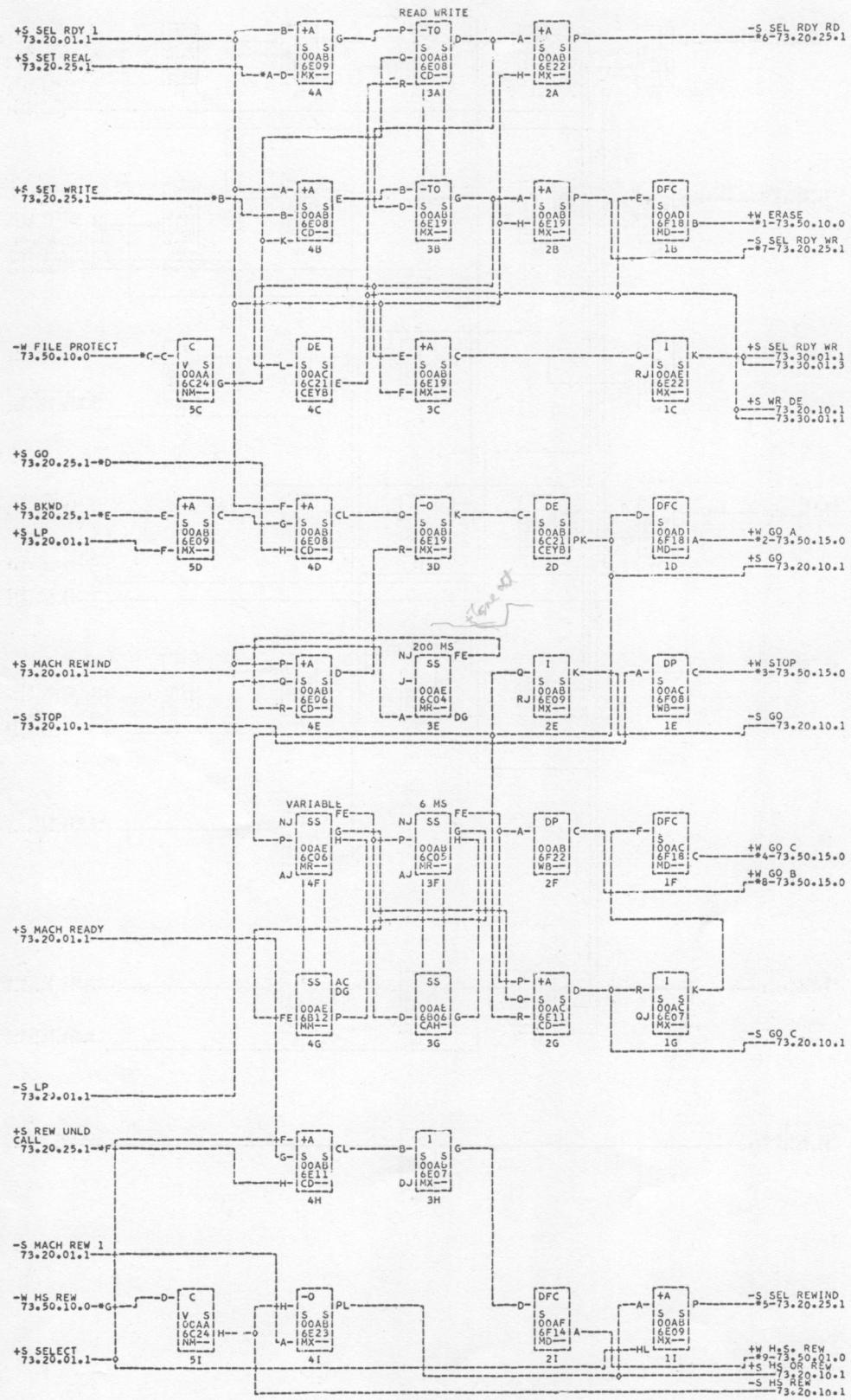
NOTE: +12 FP IS CONNECTED TO D26 COM VIA D25K TO D26R.  
SEE PAGE 73.5010.0

## READ HEAD WIRING

TRACK		LOGIC BLOCK PIN	EDGE CONN	HEAD PIN
1	YEL	A18J	A25A	F
	R	A18A	A25B	H
2	YEL	A19J	A25C	E
	R	A19A	A25D	P
4	YEL	A20J	A25E	D
	R	A20A	A25F	N
8	YEL	A21J	A25G	C
	R	A21A	A25H	B
A	YEL	A22J	A25L	M
	R	A22A	A25M	A
B	YEL	A23J	A25N	R
	R	A23A	A25P	L
C	YEL	A24J	A25Q	J
	R	A24A	A25R	K

INTERNATIONAL BUSINESS MACHINES CORP.	DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME SYSTEMS DIAGRAM	11-21-60	248150-C			X PRINT TO ENG. SPEC. NO.	
73.04.08.0	1-11-61	248747			895291	
DESIGN RAV 10-21-60 MODEL 7330	3-9-61	249254				
DETAIL ID 10-21-60	4-19-61	249434				
CHECK RAR 10-21-60 DRAW	2-9-62	251009			DWG. SIZE .	
APPRO LBF 10-23-60 CHECK						73.04.08.0



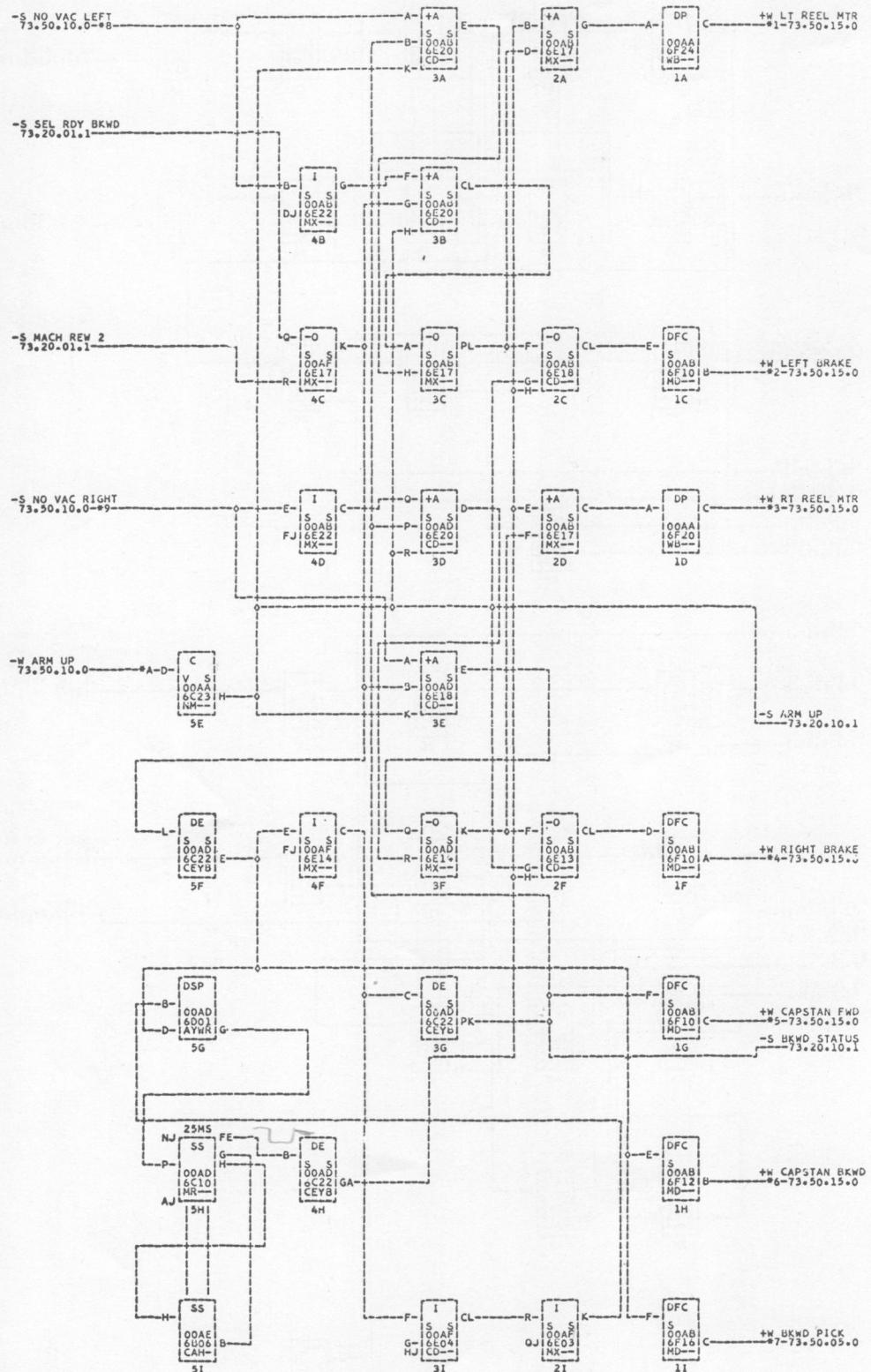


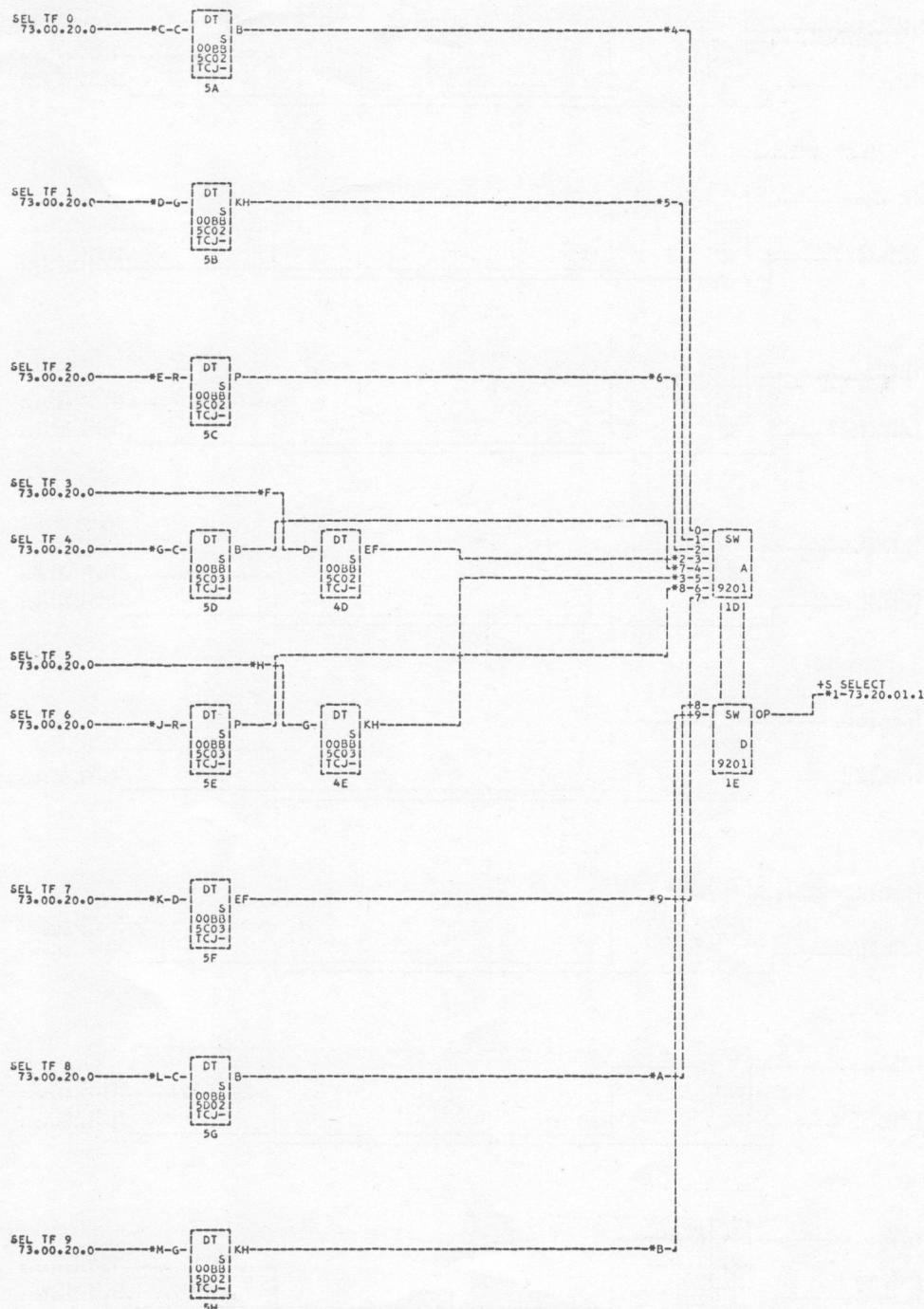
\*1--00A6C25R \*2--00A6F26H \*3--00A6F26K \*4--00A6F26C \*5--00A6C26B \*6--00A6C26F \*7--00A6E26A \*8--00A6F26G  
 \*9--00A6D25N \*A--00A6C26F \*B--00A6C26G \*C--00A6D25D \*D--00A6C26K \*E--00A6C26C  
 \*F--00A6E26G \*G--00A6D25B

## COMMENTS

TAG	DATE	E-C-NO.									
A	03-07-60	248150G	D	12-12-60	249727	G	01-26-61	248997	I	03-01-61	249254
E	03-24-61	249434	F	06-14-61	249769	G	10-22-61	249984	H	01-10-62	251009





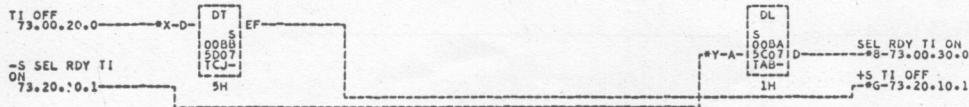
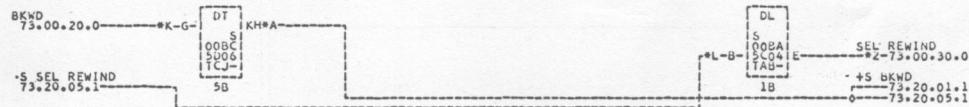


\*1--00A6C251 \*2--00B5B030 \*3--00B5B035 \*4--00B5B034 \*5--00B5B039 \*6--00B5B03C  
 \*2--00B5B035 \*3--00B5B036 \*4--00B5B034 \*5--00B5B039 \*6--00B5B03C  
 \*C--00B5M077--00B5N077--00B5C01A \*D--00B5M079--00B5N079--00B5C01C \*E--00B5M086--00B5N086--00B5C01E  
 \*F--00B5M088--00B5N088--00B5C01G \*G--00B5M097--00B5N097--00B5C01K \*H--00B5M099--00B5N099--00B5C01H  
 \*J--00B5M106--00B5N106--00B5C01P \*K--00B5M108--00B5N108--00B5C01R \*L--00B5M117--00B5N117--00B5D01A  
 \*M--00B5M119--00B5N119--00B5D01C

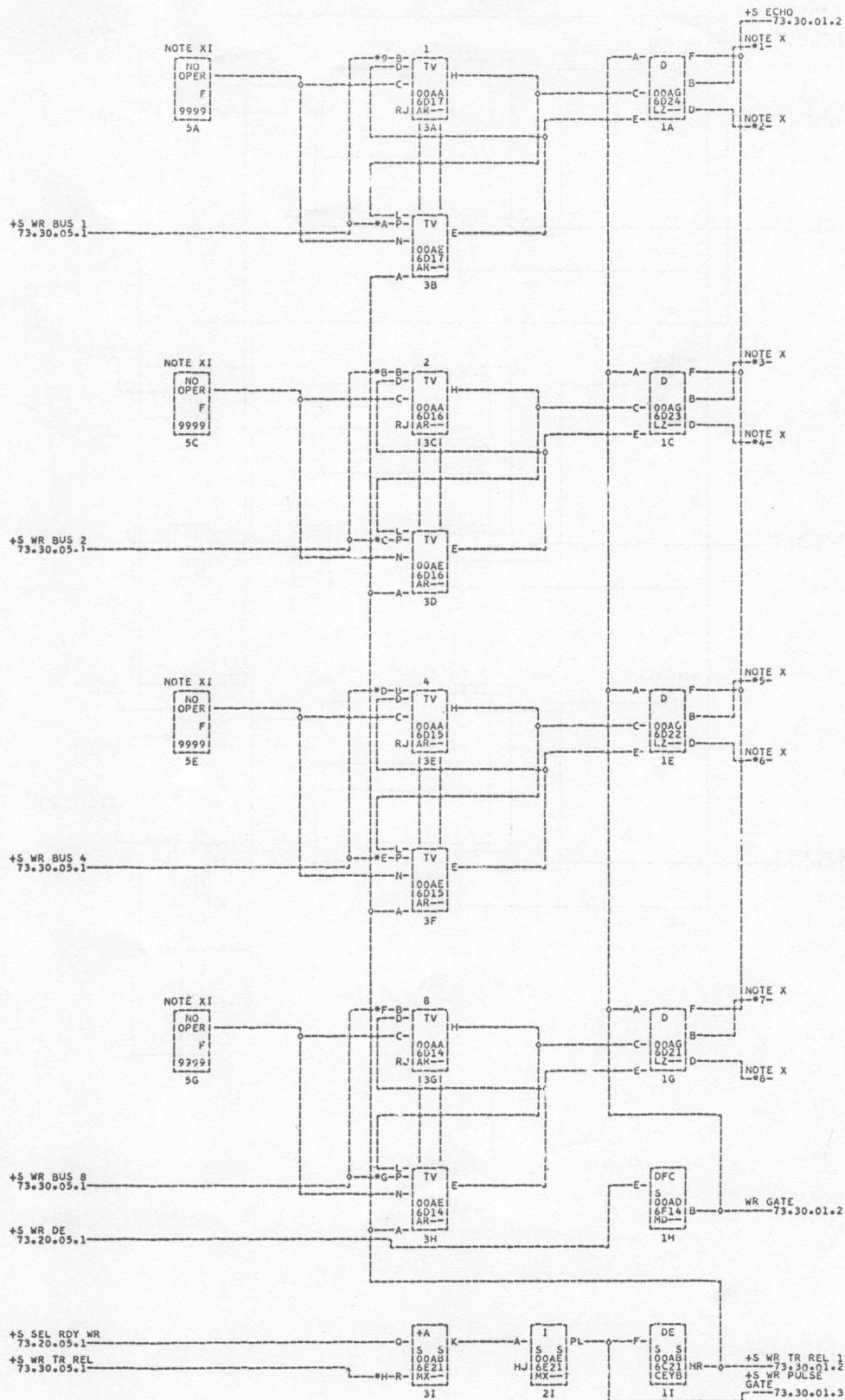
## COMMENTS

TAG DATE E.C.NO. TAG DATE E.C.NO. TAG DATE E.C.NO. TAG DATE E.C.NO.

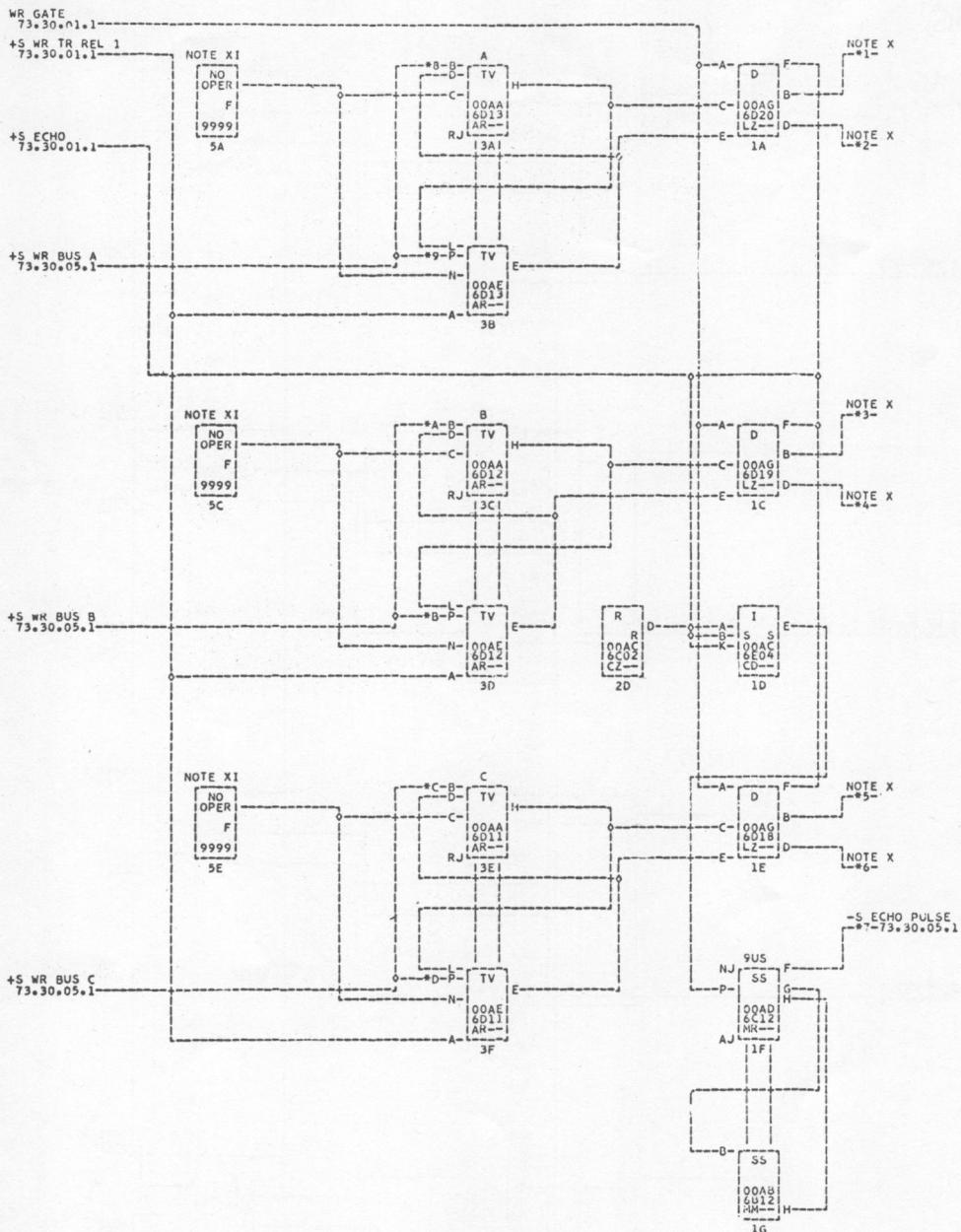
A 10-07-60 248150G B 12-13-60 248747 C 03-24-61 249434 D 01-10-62 251009



COMMENTS	TAG	DATE	E.C. NO.	TAG	DATE	E.C. NO.	TAG	DATE	E.C. NO.	TAG	DATE	E.C. NO.
	1A	10-07-60	248150G	1B	12-13-60	24K-37	1C	10-22-61	249984			



\*1-00A6D26A \*2-00A6D26B \*3-00A6D26C \*4-00A6D26D \*5-00A6D26E \*6-00A6D26F \*7-00A6D26G \*8-00A6D26H  
\*9-00A6E25A \*A-00A6E25A \*B-00A6E25C \*C-00A6E25C \*D-00A6E25E \*E-00A6E25E  
\*F-00A6E25G \*G-00A6E25G \*H-00A6C26H



\*1--00A6D26L \*2--00A6C26K \*3--00A6D26H \*4--00A6D26M \*5--00A6D26Q \*6--00A6D26P \*7--00A6C26M \*8--00A6E25L  
\*9--00A6E25L \*A--00A6E25N \*B--00A6E25N \*C--00A6E25Q \*D--00A6E25Q

NOTE X SEE PAGE 73.30.01.3  
FOR PRACTICAL INFORMATION  
NOTE XI FROM DELAY LINE TAPS  
PAGE 73.30.01.3

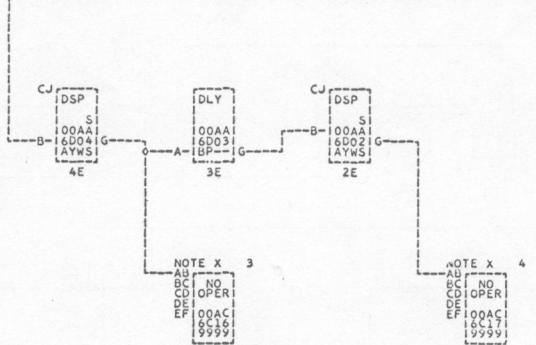
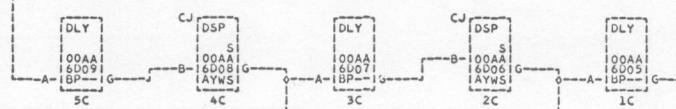
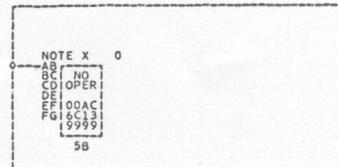
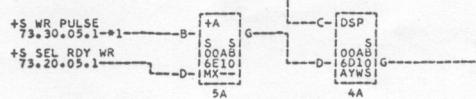
TAG	DATE	E+C NO*	TAG	DATE	E+C NO*	TAG	DATE	E+C NO*	TAG	DATE	E+C NO*
IA 10-07-60	248150G	IB 12-12-60	248247	IC 01-26-61	2481897	ID 03-01-61	249254				
IE 03-24-61	248434	IF 10-22-61	248204	IG 01-10-61	251009	II					

0556858

DELAY LINES

7330

73+30+01+3

\*S WR PULSE  
73+30+05+1-----

\*1--00A6C26L-----

NOTE X THE DELAY LINE TAPS  
GO TO PAGE 73+30+01+3  
OR 73+30+01+2

TAG	DATE	E-C NO.	TAG	DATE	E-C NO.	TAG	DATE	E-C NO.	TAG	DATE	E-C NO.
IA	12-13-60	248747	IB	03-24-61	249434	IC	10-22-61	249984			

0556875

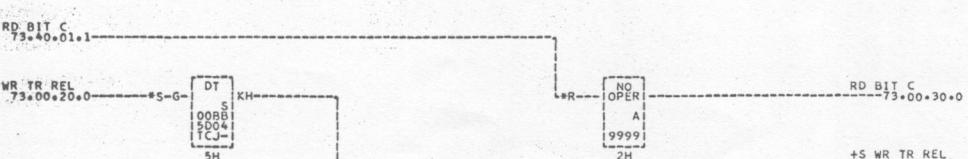
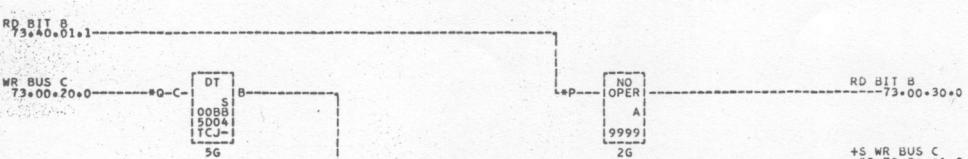
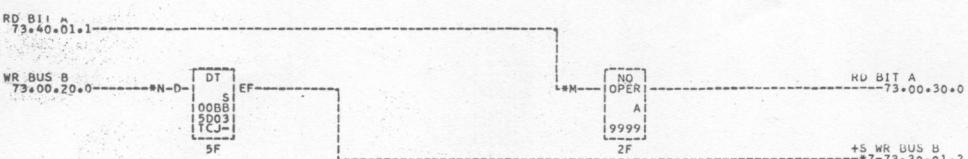
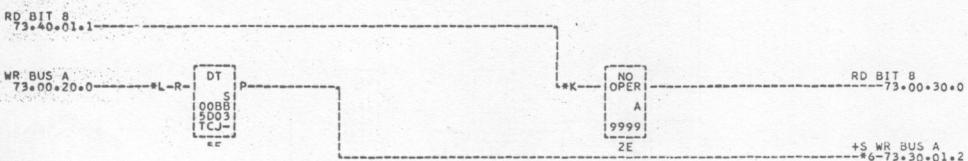
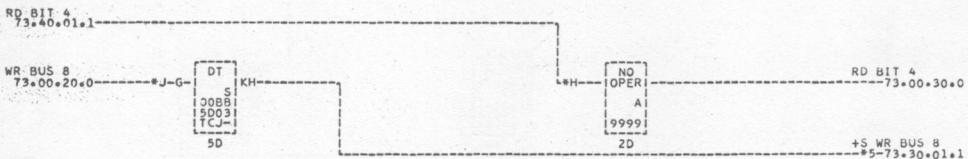
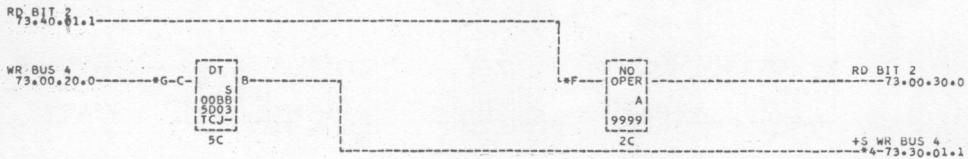
LINE CONVERSION WRITE

7330

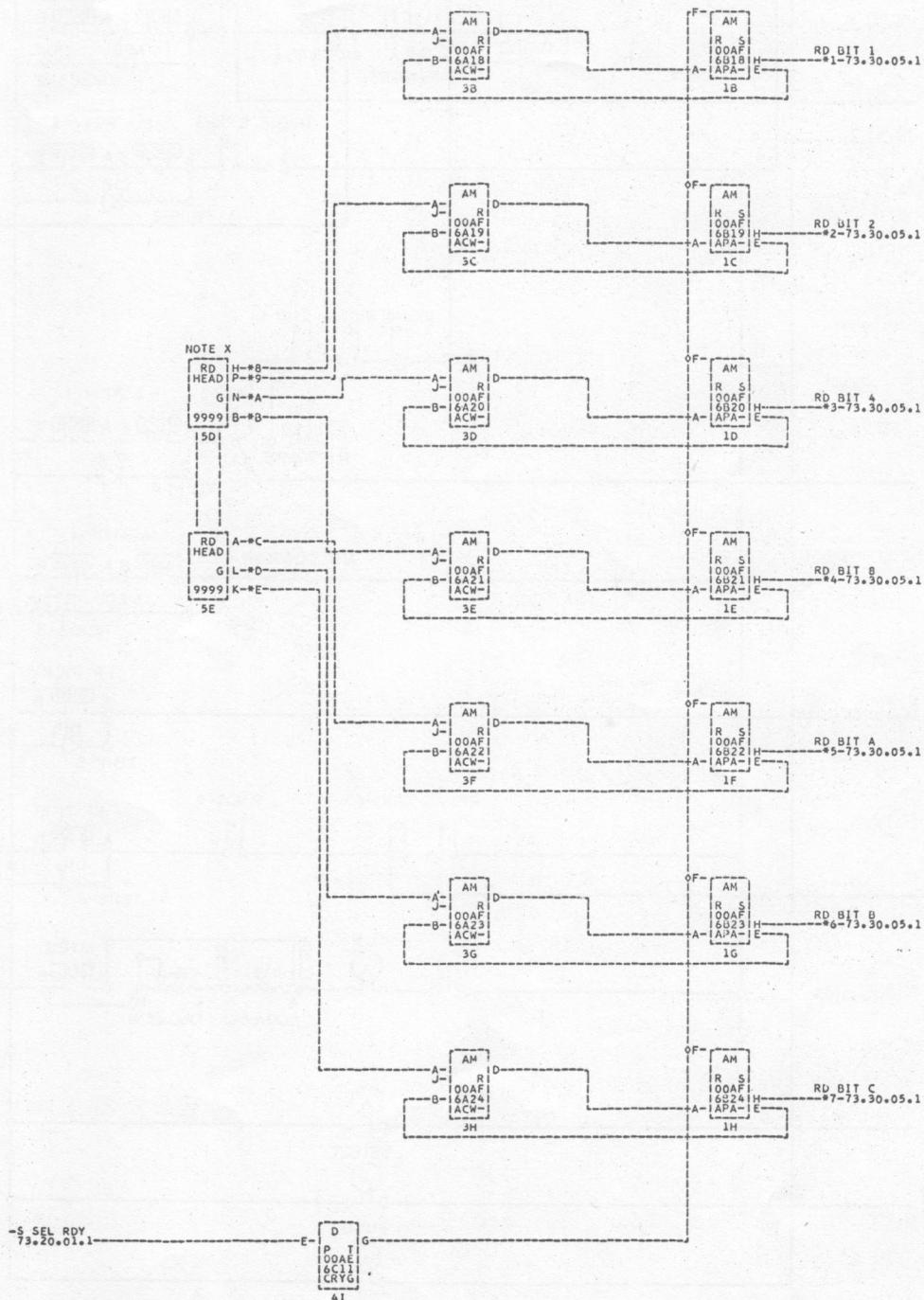
73\*30\*05\*1

-S ECHO PULSE

\*73\*30\*01\*2



\*1--00B5G05K--00B5M122--00B5M122--\*2--00B5B02B--\*3--00B5B02C--\*4--00B5B02D--\*5--00B5B02E--\*6--00B5B02F--\*7--00B5B02G  
 \*D--00B5B08A--00B5R07A--00B5M02R--00B5N082--\*E--00B5M174--00B5N174--00B5D01G  
 \*E--00B5B08C--00B5R07C--00B5M084--00B5N084--\*F--00B5M176--00B5N176--00B5D01K  
 \*F--00B5B08D--00B5R07D--00B5M085--00B5N085--\*G--00B5M178--00B5N178--00B5D01L  
 \*G--00B5B08E--00B5R07E--00B5M095--00B5N095--\*H--00B5M180--00B5N180--00B5D01M  
 \*H--00B5B08L--00B5R07L--00B5M102--00B5N102--\*I--00B5M182--00B5N182--00B5D01R  
 \*I--00B5B080--00B5R080--00B5M104--00B5N104--\*J--00B5M184--00B5N184--00B5D05A  
 \*J--00B5B082--00B5R082--00B5M113--00B5N113--\*K--00B5M194--00B5N194--00B5D05C  
 COMMENTS TAG DATE E.C.NO. TAG DATE E.C.NO. TAG DATE E.C.NO. TAG DATE E.C.NO.  
 1A 10-07-60 248150G 1B 12-13-60 248747 1C 03-24-61 249434



\*1--00A6B25A \*2--00A6B25C \*3--00A6B25E \*4--00A6B25G \*5--00A6B25L \*6--00A6B25N \*7--00A6B25Q \*8--00A6A25B  
 \*9--00A6A25D \*A--00A6A25F \*B--00A6A25H \*C--00A6A25M \*D--00A6A25P \*E--00A6A25R

NOTE X SEE PAGE 73\*04\*08\*0 FOR HEAD WIRING

TAG	DATE	E+C NO*	TAG	DATE	E+C NO*	TAG	DATE	E+C NO*	TAG	DATE	E+C NO*
I A	10-07-60	248150G	I B	12-13-60	248747	I C	01-26-61	248897	I D	03-01-61	249254
E 03-24-61	249434	F 06-14-61	249769	G 01-10-62	251009						

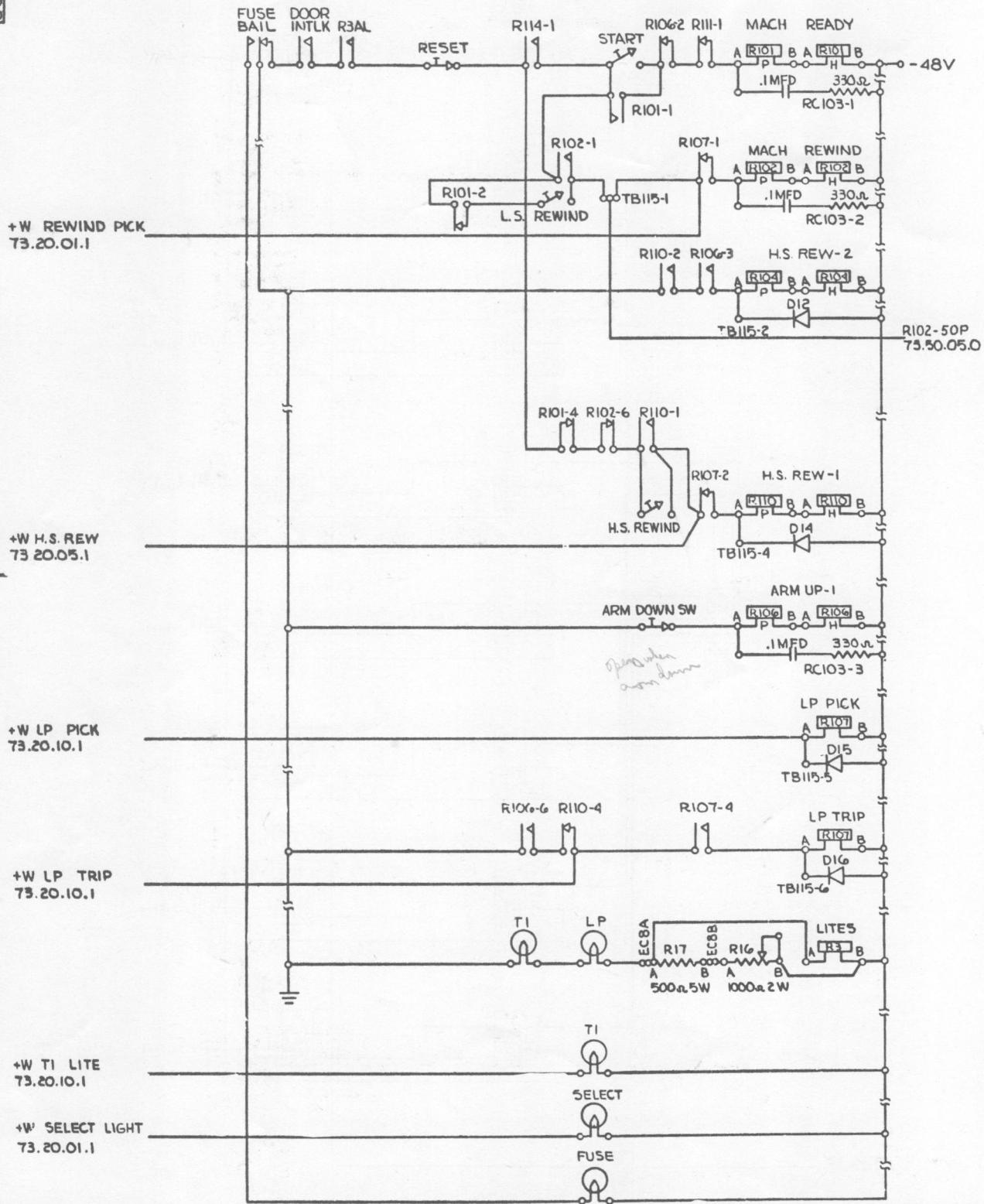
556877

A

## RELAY LOGIC

B

73.50.010



## NOTES

**X** - 48 AND GROUND DISTRIBUTION  
ARE NOT POINT TO POINT

A

B

INTERNATIONAL BUSINESS MACHINES CORP.

NAME	SYSTEMS DIAGRAM	DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
DESIGN	73.50.01.0	11-2-60	248150-0	1228-61	249984		
DETAIL	RAV 4-2-60 MODEL 7330	3-9-61	249254				
CHECK	1D 5-9-60	4-19-61	249434				
APPRO	RAV 8-11-60 DRAW	7-7-61	249769				
	LB F 10-18-60 CHECK	10-4-61	249780				

X PRINT TO ENG. SPEC. NO.  
895291

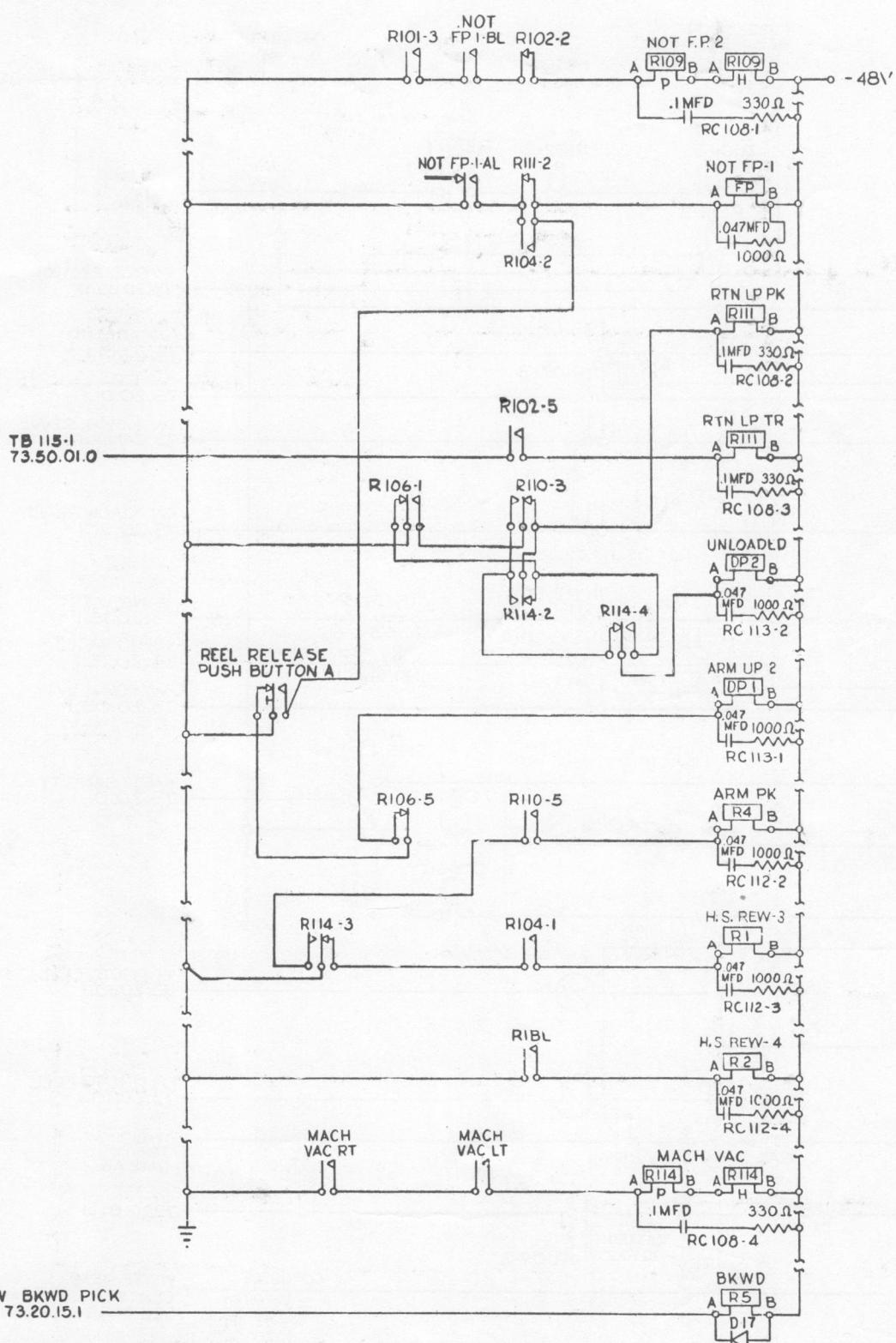
73.50.01.0

A

## RELAY LOGIC

B

73.50.050



## NOTES

-48 AND GROUND  
DISTRIBUTION ARE NOT  
POINT TO POINT

A

B

NAME	SYSTEMS DIAGRAM	DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE
NAME	73.50.050	11-21-60	248150-G	2-27-62	251021	X PRINT TO ENG. SPEC. NO. 895291
DESIGN	RAY 4-2-60	4-19-61	249434			
DETAIL	10-18-60	7-7-61	249769			
CHECK	RAY 4-2-60	10-4-61	249780			
APPRO	LBF 10-18-60	12-28-61	249984			

DEVELOPMENT NO.
05
6
8
78

73.50.050

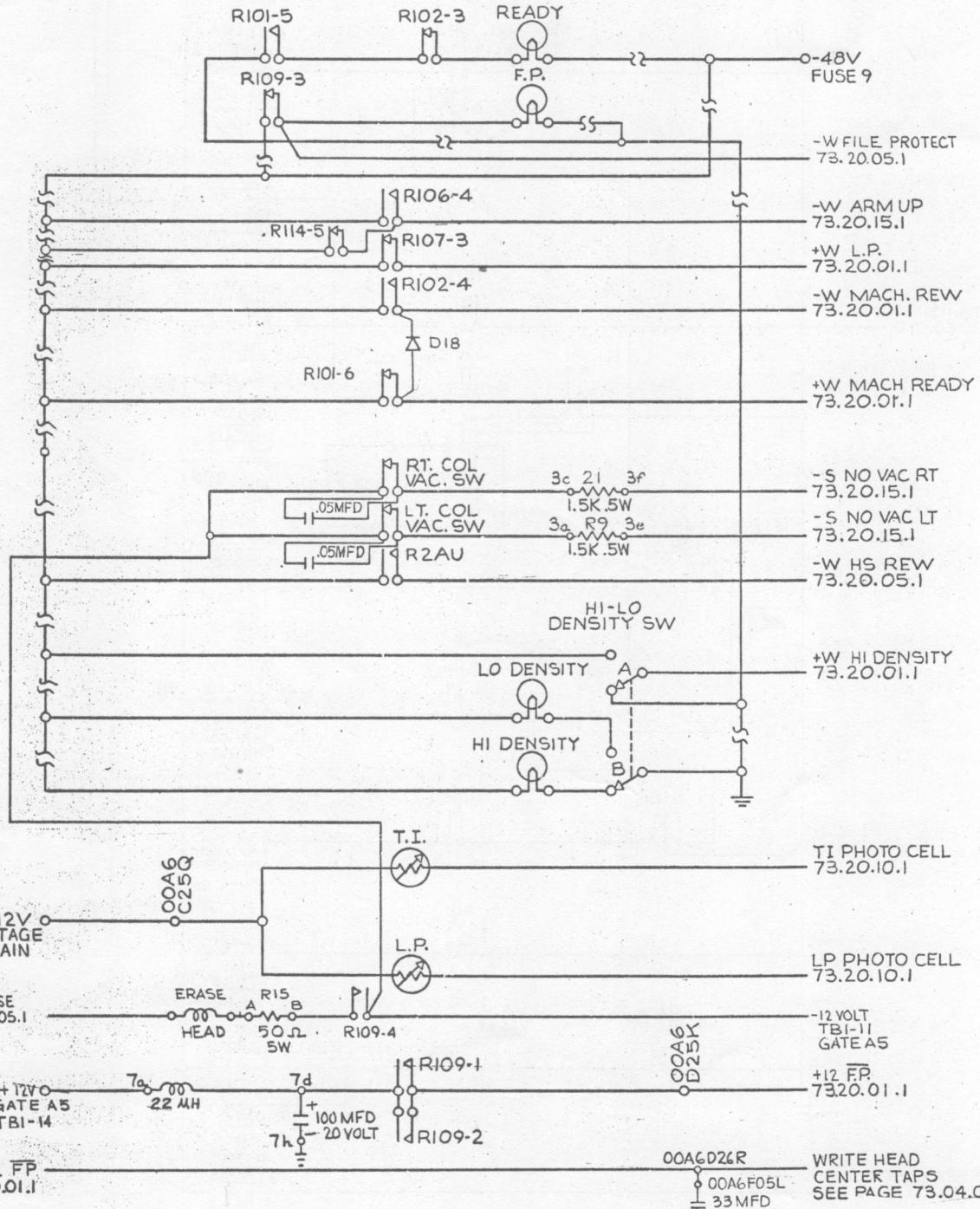
556879

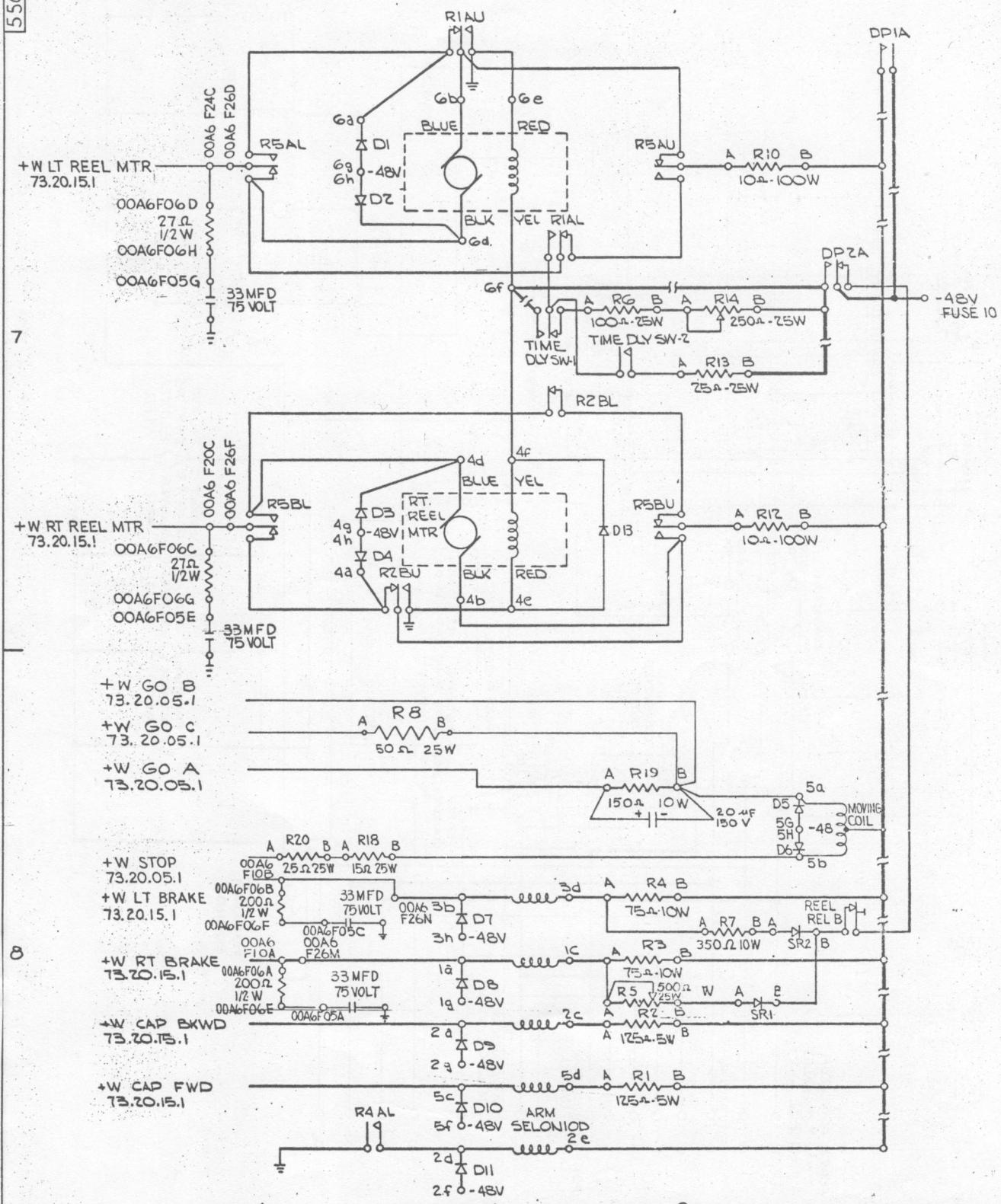
A

## RELAY LOGIC

B

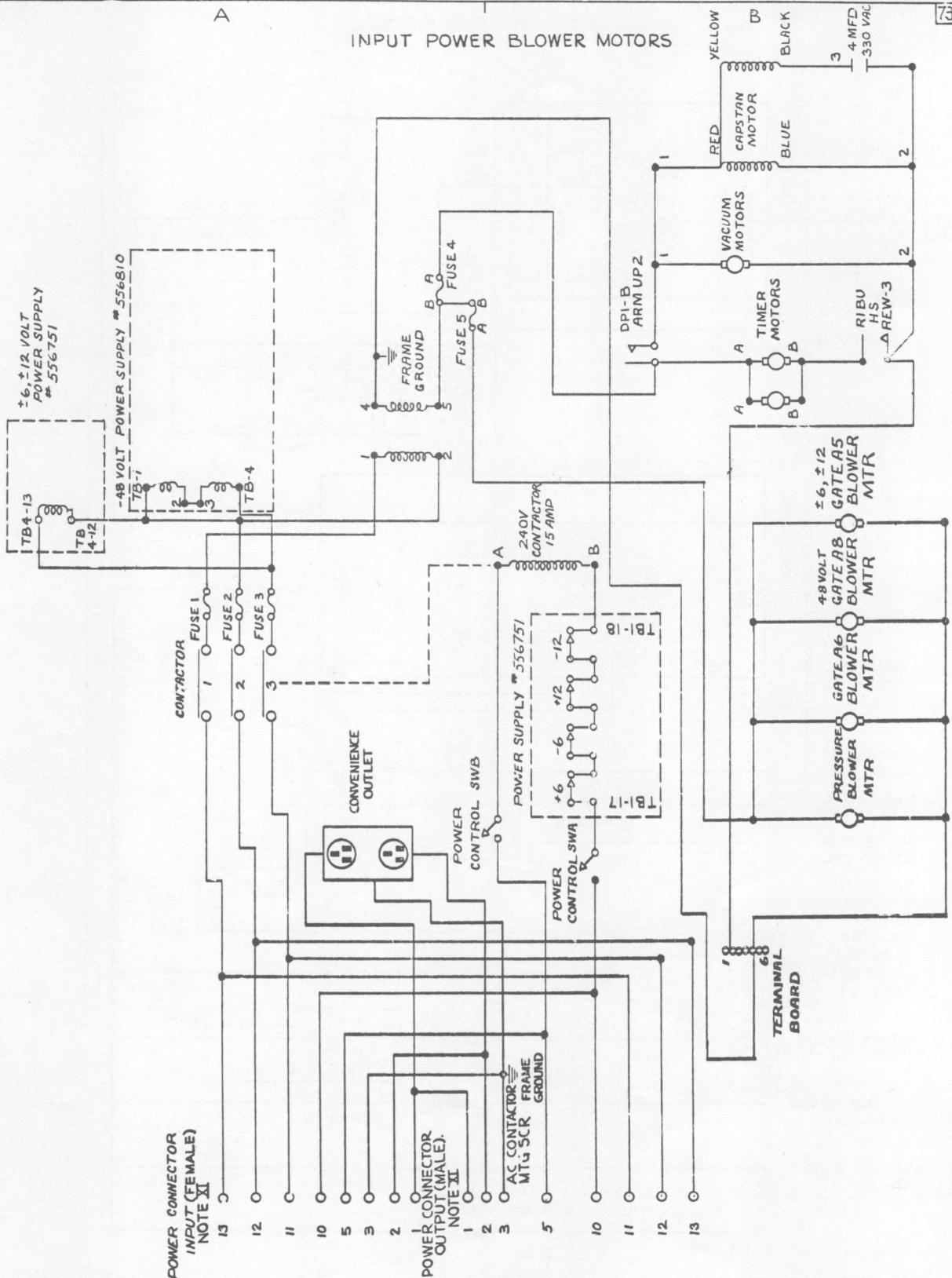
73.50.10.0





## NOTES

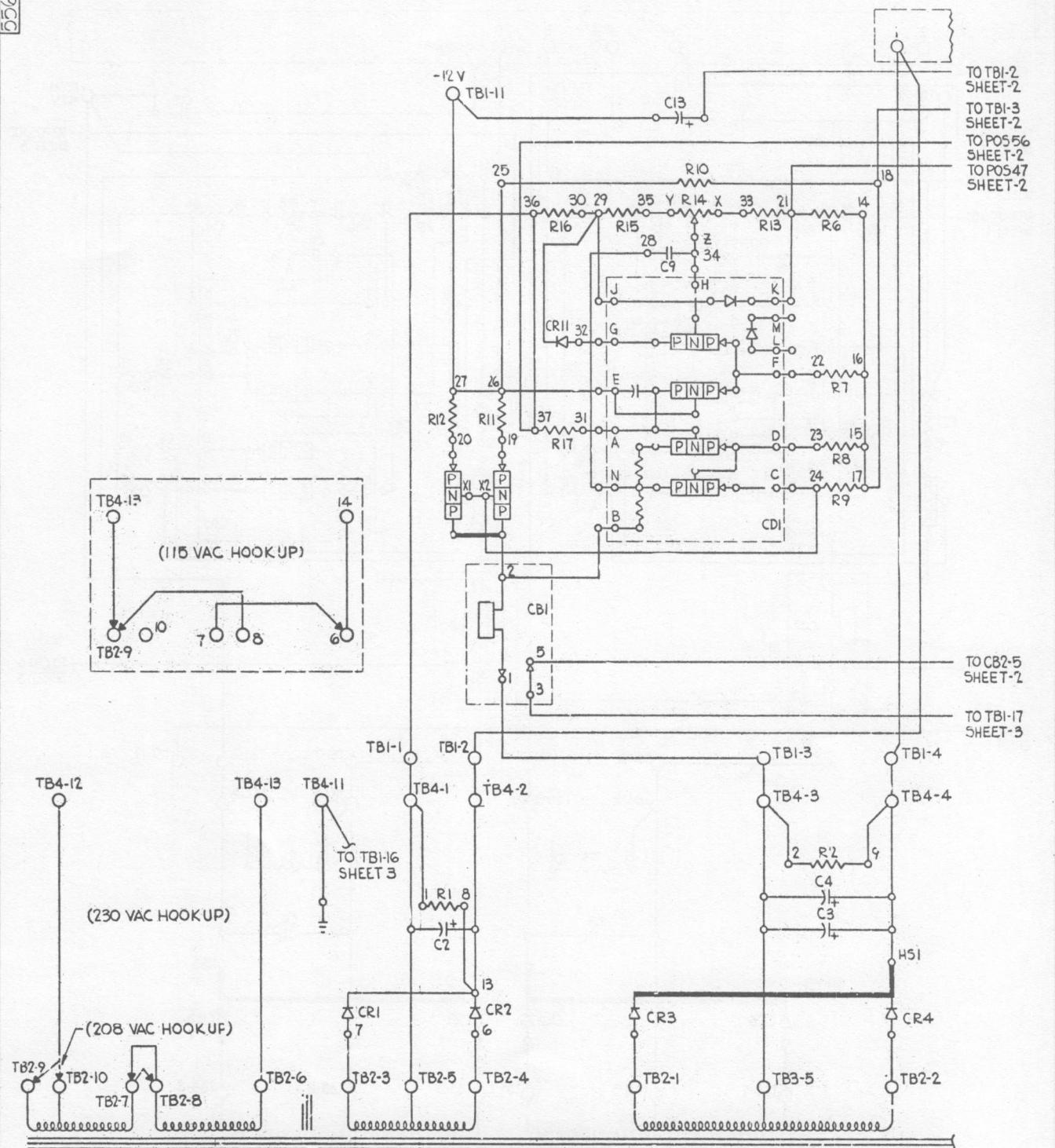
X-48 AND GROUND DISTRIBUTION ARE  
NOT POINT TO POINT

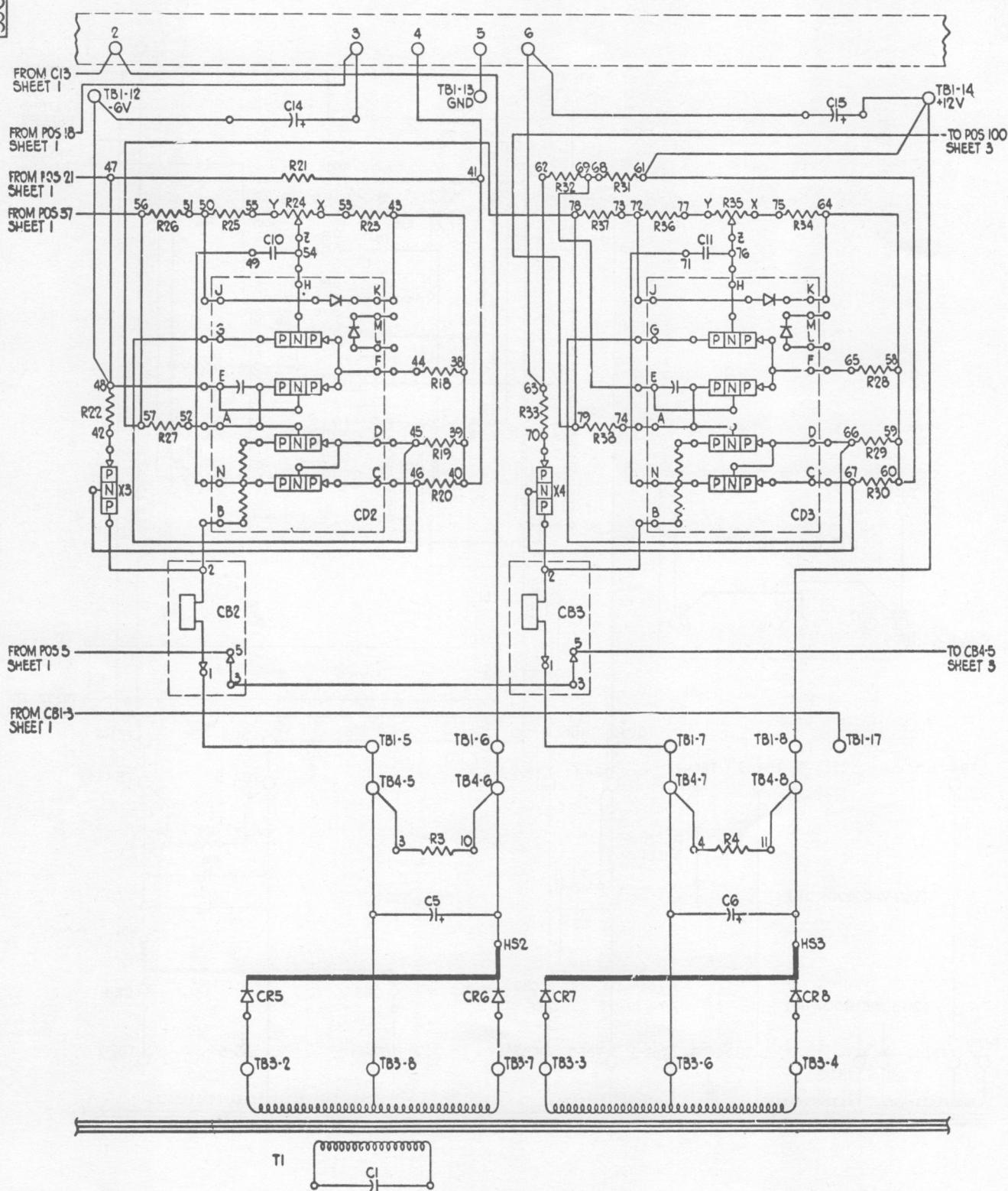


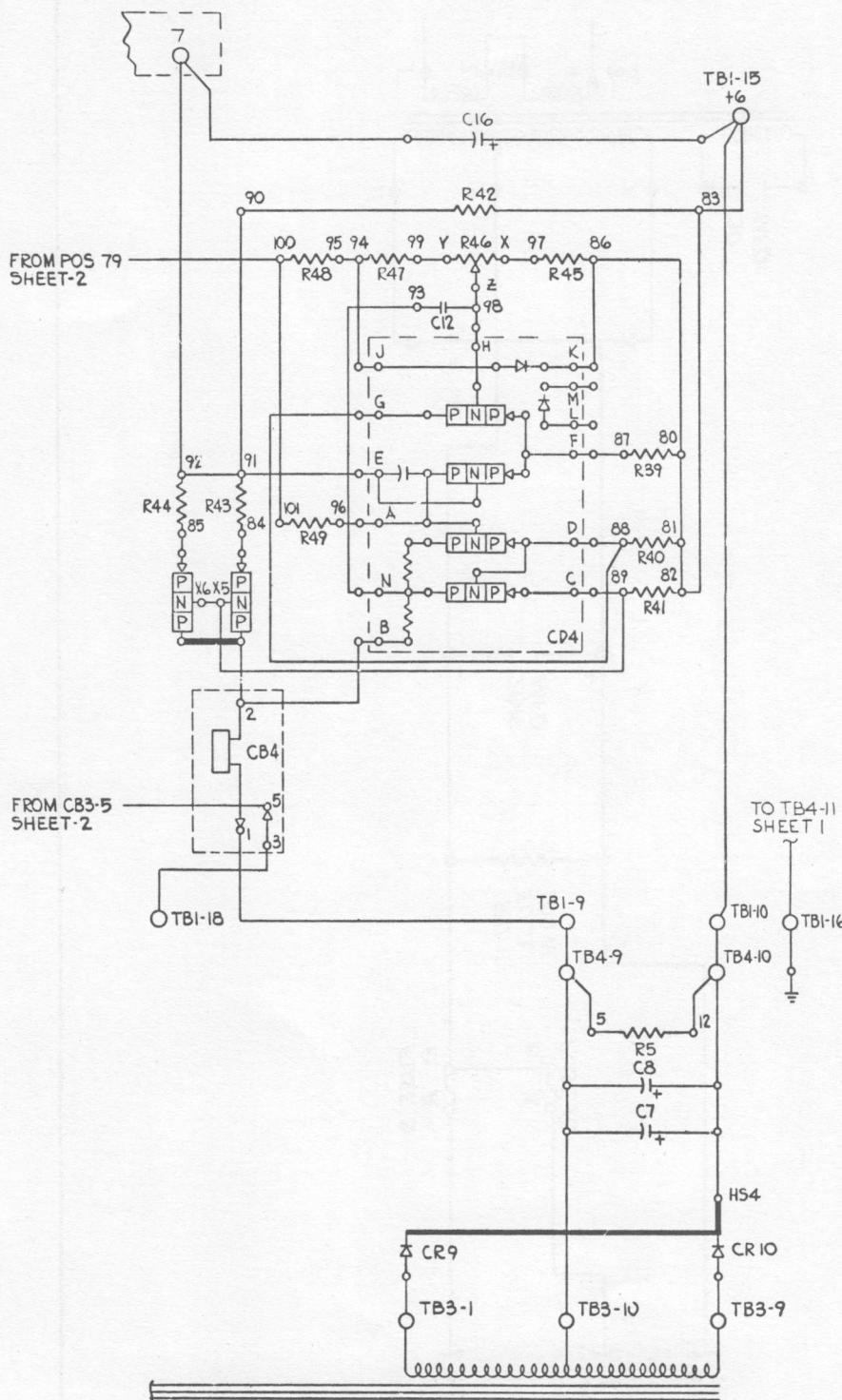
## NOTES

## II POWER CONNECTOR POINTS COMMONED AT THEIR DESTINATION

INTERTECHNICAL BUSINESS MACHINES CORP.		DATE	CHARGE NO.	DATE	CHARGE NO.	NOTE	DEVELOPMENT NO.
NAME	SYSTEMS DIAGRAM	11-21-60	248150-G			X PRINT TO ENG. SPEC. NO.	UT
DESIGN	73.50.20.0	73-50-20.0		1-11-61	248747		UT
DETAIL	RAV 4-2-60 MODEL	7330		7-7-61	249769		0
CHECK	REB	11-21-60		12-28-61	249984		88
APPROV	LB F 10 15-60	CHEK					88







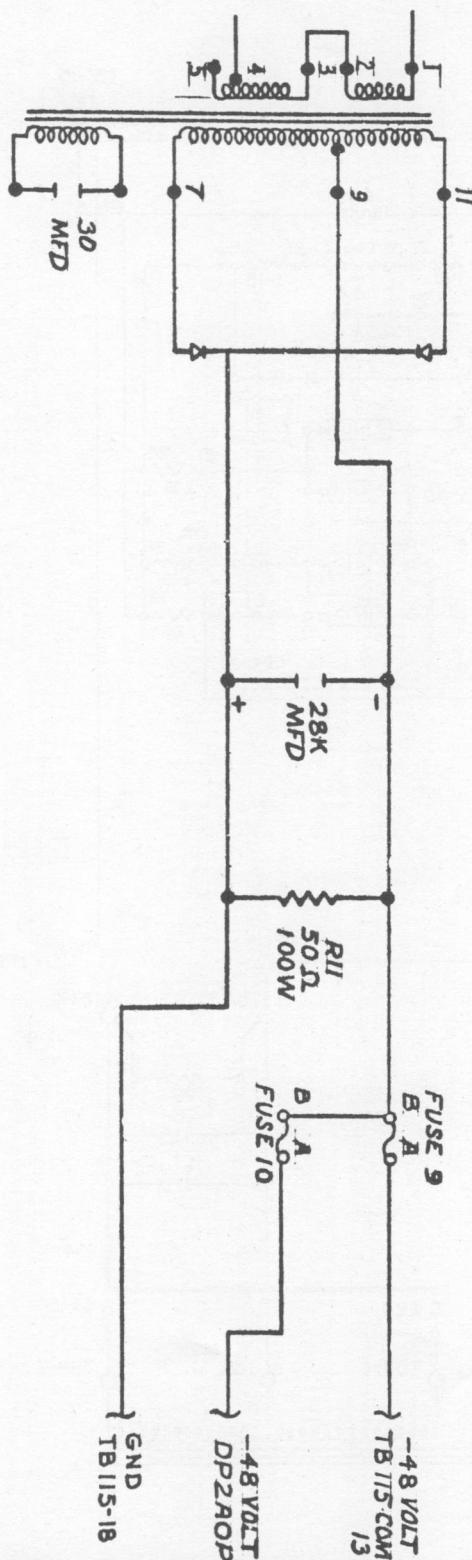
CODE	DESCRIPTION		
CR1-2	DIODE		
CR3-10	DIODE	3A1-C	
CR-11	DIODE	FS	
T1	FERRO		
X1-X6	TRANSISTOR (O49)		
CBI	CIR BREAKER	3A	
CB2-CB3	CIR BREAKER	3A	
CB4	CIR BREAKER	3A	
C1	15 MFD 330 VAC		
C2	2500MFD 45 VDC		
C3-C4	10000 MFD 25 VDC		
C5	14000MFD 13 VDC		
C6	10000 MFD 25 VDC		
C7-C8	14000 MFD 13 VDC		
C9,C10,C11,C12	.001 MFD 100 VDC		
C13	4000 MFD 30VDC		
C14	7000 MFD 13VDC		
C15	4000 MFD 30VDC		
C16	7000 MFD 13VDC		
R1	3.3K 1W C		
R2-R5	1K 1W C		
R6-R8	3.9K 1/2W C		
R9-R10	470Ω 1W C		
R11-R12	0.1Ω 1W 1% WW		
R13	1.9K 5W 1% WW		
R14	POT 250Ω 1/2W C		
R15	1.2K 5W 1% WW		
R16	1.5K 5W 1% WW		
R17	15K 1/2W C		
R18-R19	2K 1/2W C		
R20-R21	220Ω 1/2W C		
R22	0.1Ω 1W 1% WW		
R23	1.9K 5W 1% WW		
R24	POT 250Ω 1/2W C		
R25	1.2K 5W 1% WW		
R26	1.9K 5W 1% WW		
R27	20K 1/2W C		
R28	2K 1/2W C		
R29	3.9K 1/2W C		
R30	470Ω 1W C		
R31-R32	590Ω 3W 5% WW		
R33	0.1Ω 1W 1% WW		
R34	1.9K 5W 1% WW		
R35	POT 250Ω 1/2W C		
R36	1.2K 5W 1% WW		
R37	2.8K 5W 1% WW		
R38	24K 1/2W C		
R39-R40	2K 1/2W C		
R41-R42	220Ω 1/2W C		
R43-R44	0.1Ω 1W 1% WW		
R45	1.9K 5W 1% WW		
R46	POT 250Ω 1/2W C		
R47	1.2K 5W 1% WW		
R48	2.4K 5W 1% WW		
R49	24K 1/2W C		
CD1-CD4	STD SMS CARD A5M		

INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME	SYSTEMS DIAGRAM					X PRINT TO ENG. SPEC. NO.	
DESIGN	73.50.25.0	SEE INDEX CARD				895291	356
DETAIL	14-ME-16-60	4-6-61	249367				5
CHECK	RAV 12-17-60	B-2-61	249773				7
APPROV	LBF 12-17-60	DRAW	MLART 12-17-60	12-28-61	249984		73.50.25.0
	CHECK	AEK	12-17-61				4

## DWG. SIZE - B -48 VOLT POWER SUPPLY

73.50.300

556857



INTERNATIONAL BUSINESS MACHINES CORP.	DATE	CHARGE NO.	DATE	CHARGE NO.	NOTE	DEVELOPMENT NO.
NAME SYSTEM DIAGRAM	11-21-60	248150-G			X PRINT TO ENG. SPEC. NO.	556857
73.50.30.0	1-11-61	248747			895291	
DESIGN RAY 11-1-60 MODEL 7330						
DETAIL REB 11-2-60						
CHECK RAY 11-9-60 DRAW						
APPRO LBF 11-9-60 CHECK						73.50.30.0

556828

73.50.35.0

